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FILE COVERS 1907 - 21 Jan 2004 VOL 140 ISS 4 FILE LAST UPDATED: 20 Jan 2004 (20040120/ED)

inventors

This file contains CAS Registry Numbers for easy and accurate substance identification.

'OBI' IS DEFAULT SEARCH FIELD FOR 'CAPLUS' FILE

L1 76 SEA FILE=CAPLUS ABB=ON COLACO C?/AU

L2 2 SEA FILE=CAPLUS ABB=ON L1 AND GLYCOSID?/TI L3 1 SEA FILE=CAPLUS ABB=ON MEDICAL/TI AND L2

=> d iall 13

L3 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1999:48730 CAPLUS

DOCUMENT NUMBER: 130:129975

ENTRY DATE: Entered STN: 25 Jan 1999

TITLE: Modified glycosides and compositions

Patent

comprised thereof for **medical** and other uses

INVENTOR(S): Colaco, Camilo

PATENT ASSIGNEE(S): Quadrant Holdings Cambridge Limited, UK

SOURCE: PCT Int. Appl., 39 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

LANGUAGE: English

INT. PATENT CLASSIF.:

MAIN: CO7H

CLASSIFICATION: 63-6 (Pharmaceuticals)

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA	PATENT NO.			KI	ND	DATE			APPLICATION NO. DATE									
									_									
WO	9901	463		A2		19990114			WO 1998-GB1962 19980703									
WO	WO 9901463			A	3	19990325												
	W:	AL,	AM,	AT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CU,	CZ,	DE,	
		DK,	EE,	ES,	FI,	GB,	GE,	GH,	GM,	GW,	HR,	HU,	ID,	IL,	IS,	JP,	KE,	
		KG,	KP,	KR,	ΚZ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	MD,	MG,	MK,	MN,	MW,	
		MX,	NO,	ΝZ,	PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	TJ,	TM,	TR,	
		TT,	UA,	UG,	US,	UΖ,	VN,	YU,	ZW,	AM,	ΑZ,	BY,	KG,	ΚZ,	MD,	RU,	ТJ,	TM
	RW:					MW,												
		FI,	FR,	GB,	GR,	ΙE,	ΙΤ,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ,	CF,	CG,	CI,	
						MR,										•	•	

EP 994887 20000426 EP 1998-932361 A2 19980703 20021127 EP 994887 В1 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI JP 2002510316 Т2 20020402 JP 1999-506677 19980703 AT 228528 E 20021215 AT 1998-932361 19980703 ES 2187038 Т3 20030516 ES 1998-932361 19980703 A1 20020124 US 2001-923023 20010806 US 2002009464 US 1997-51727P P 19970703 PRIORITY APPLN. INFO.: WO 1998-GB1962 W 19980703 US 1998-111925 A1 19980708

ABSTRACT:

Modified glycosides YnX (Y = saccharide subunit; X = C5-6 sugar alc.; n = 1-6; part or all of the OH groups in X and Y are derivatized as esters or ethers) are provided which can be used to form a variety of materials including biodegradable solid delivery systems and optically clear colored devices or coatings. The solid delivery systems can be used for delivery and release of a variety of substances including lipids, proteins, peptides, peptidomimetics, hormones, saccharides, nucleic acids, and nucleoproteins, as well as viruses, bacteria, antigens, and haptens coupled to carriers; they can be in the form of tablets for oral administration, or in the form of powders, microspheres or implants for i.v., intradermal, transdermal, pulmonary, or other route of administration. The modified glycosides may be processed to form a vitreous glass matrix having a substance, such as a therapeutic agent, or an optically active dye incorporated therein. The vitreous glass matrix may be provided in a solid dosage form which is capable of releasing a therapeutic substance in situ at various controlled rates. Alternatively, a melt or soln. contg. modified glycosides and a dye can be used to produce optically clear colored coatings, plastic articles, and synthetic fibers. Thus, nonaacetylated derivs. of lactitol, palatinit, .alpha.-D-glucopyranosyl-(1.fwdarw.6)-sorbitol, and .alpha.-D-glucopyranosyl-(1.fwdarw.6)-mannitol with a range of m.p. values and glass transition temps. were produced by reaction of the polyols with Ac20. Glasses produced by quenching melts of the acetylated polyols were good solvents for poorly water-sol. solutes such as Disperse Red 1; the solutes had little effect on the glass transition temp. and did not cause devitrification. Lactitol nonaacetate glasses contg. cyclosporin A and diltiazem-HCl showed different profiles of controlled release on immersion in saline soln.; the release rates were altered by addn. of Tween 20 to the soln.

SUPPL. TERM: glycoside modified glass drug delivery; coating modified

glycoside glass dye

INDEX TERM: Immunostimulants

(adjuvants; modified glycosides and compns. comprised

thereof for medical and other uses)

INDEX TERM: Haptens

ROLE: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use);

BIOL (Biological study); USES (Uses)

(conjugates with carriers; modified glycosides and compns. comprised thereof for medical and other uses)

INDEX TERM: Drug delivery systems

(controlled-release, solid; modified glycosides and compns. comprised thereof for medical and other uses)

INDEX TERM: Drug delivery systems

(disks; modified glycosides and compns. comprised thereof

for medical and other uses)

INDEX TERM: Glycosides

Oligosaccharides, biological studies

ROLE: DEV (Device component use); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological

study); PREP (Preparation); USES (Uses)

(esters and ethers; modified glycosides and compns.

comprised thereof for medical and other uses)

INDEX TERM: Drug delivery systems (films; modified glycosides and compns. comprised thereof for medical and other uses) INDEX TERM: Drug delivery systems (implants; modified glycosides and compns. comprised thereof for medical and other uses) INDEX TERM: Drug delivery systems (lozenges; modified glycosides and compns. comprised thereof for medical and other uses) INDEX TERM: Glass fibers, biological studies ROLE: DEV (Device component use); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (microfibers; modified glycosides and compns. comprised thereof for medical and other uses) INDEX TERM: Drug delivery systems (microparticles; modified glycosides and compns. comprised thereof for medical and other uses) INDEX TERM: Drug delivery systems (microspheres; modified glycosides and compns. comprised thereof for medical and other uses) INDEX TERM: Animal virus Bacteria (Eubacteria) Drug delivery systems Dyes Genetic vectors Glass transition temperature Needles (tools) Optical filters Peptidomimetics Transparent materials Vitreous materials (modified glycosides and compns. comprised thereof for medical and other uses) INDEX TERM: Antigens Carbohydrates, biological studies Cytokines Enzymes, biological studies Growth factors, animal Hormones, animal, biological studies Interferons Interleukins Lipids, biological studies Nucleic acids Nucleoproteins Peptides, biological studies Proteins, general, biological studies ROLE: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (modified glycosides and compns. comprised thereof for medical and other uses) INDEX TERM: Isomaltooligosaccharides Maltooligosaccharides ROLE: DEV (Device component use); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (modified polyol glycosides contg.; modified glycosides and compns. comprised thereof for medical and other uses) INDEX TERM: Antibodies ROLE: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

```
(monoclonal; modified glycosides and compns. comprised
                       thereof for medical and other uses)
INDEX TERM:
                   Acetylation
                       (of glycosides; modified glycosides and compns. comprised
                       thereof for medical and other uses)
INDEX TERM:
                   Quenching (cooling)
                       (of modified glycoside melts; modified glycosides and
                       compns. comprised thereof for medical and other uses)
INDEX TERM:
                   Solutions
                       (of modified glycosides, glass formation from; modified
                       glycosides and compns. comprised thereof for medical and
                       other uses)
INDEX TERM:
                   Drug delivery systems
                       (particles; modified glycosides and compns. comprised
                       thereof for medical and other uses)
INDEX TERM:
                   Alcohols, biological studies
                   ROLE: DEV (Device component use); SPN (Synthetic
                   preparation); THU (Therapeutic use); BIOL (Biological
                   study); PREP (Preparation); USES (Uses)
                       (polyhydric, glycosides, esters and ethers; modified
                       glycosides and compns. comprised thereof for medical and
                       other uses)
INDEX TERM:
                   Drug delivery systems
                       (powders; modified glycosides and compns. comprised
                       thereof for medical and other uses)
INDEX TERM:
                   Drug delivery systems
                       (spheres; modified glycosides and compns. comprised
                       thereof for medical and other uses)
INDEX TERM:
                   Drug delivery systems
                       (suppositories; modified glycosides and compns. comprised
                      thereof for medical and other uses)
INDEX TERM:
                   Drug delivery systems
                       (tablets; modified glycosides and compns. comprised
                      thereof for medical and other uses)
INDEX TERM:
                   Metals, uses
                   Plastics, uses
                   ROLE: DEV (Device component use); USES (Uses)
                       (transparent coatings on; modified glycosides and compns.
                      comprised thereof for medical and other uses)
INDEX TERM:
                   Coating materials
                      (transparent; modified glycosides and compns. comprised
                      thereof for medical and other uses)
INDEX TERM:
                   33286-22-5, Diltiazem hydrochloride
                                                          59865-13-3,
                   Cyclosporin A
                   ROLE: BAC (Biological activity or effector, except adverse);
                   BSU (Biological study, unclassified); PRP (Properties); THU
                   (Therapeutic use); BIOL (Biological study); USES (Uses)
                       (modified glycosides and compns. comprised thereof for
                      medical and other uses)
INDEX TERM:
                   9002-72-6, Growth hormone
                                               9004-10-8, Insulin, biological
                   studies
                   ROLE: BAC (Biological activity or effector, except adverse);
                   BSU (Biological study, unclassified); THU (Therapeutic use);
                   BIOL (Biological study); USES (Uses)
                      (modified glycosides and compns. comprised thereof for
                      medical and other uses)
INDEX TERM:
                   37091-07-9P, Lactitol nonaacetate
                                                       41897-24-9P, Maltitol
                                 41897-25-0P
                   nonaacetate
                                               219827-68-6P
                                                              219827-69-7P
                   ROLE: DEV (Device component use); SPN (Synthetic
                   preparation); THU (Therapeutic use); BIOL (Biological
                   study); PREP (Preparation); USES (Uses)
                      (modified glycosides and compns. comprised thereof for
                      medical and other uses)
```

INDEX TERM:

INDEX TERM:

50-70-4P, D-Glucitol, biological studies 69-65-8P, D-Mannitol 87-99-0P, Xylitol 149-32-6P, Erythritol

488-81-3P, Ribitol 608-66-2P, Galactitol

ROLE: DEV (Device component use); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological

study); PREP (Preparation); USES (Uses)

(modified glycosides contg.; modified glycosides and compns. comprised thereof for medical and other uses)

50-69-1P, D-Ribose 50-99-7P, D-Glucose, biological studies 57-48-7P, D-Fructose, biological studies 58-86-6P,

D-Xylose, biological studies 59-23-4P, D-Galactose,

biological studies 65-42-9P, Lyxose 147-81-9P, Arabinose 3458-28-4P, D-Mannose 5556-48-9P, Ribulose 5987-68-8P,

Altrose 6038-51-3P, Allose 19163-87-2P, Gulose ROLE: DEV (Device component use); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological

study); PREP (Preparation); USES (Uses)

(modified polyol glycosides contg.; modified glycosides and compns. comprised thereof for medical and other uses)

INDEX TERM:

2872-52-8, Disperse Red 1 ROLE: PRP (Properties)

(soly. in modified glycoside glass; modified glycosides and compns. comprised thereof for medical and other uses)

=> fil reg; d scan 14 FILE 'REGISTRY' ENTERED AT 11:18:35 ON 21 JAN 2004 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2004 American Chemical Society (ACS)

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STRUCTURE FILE UPDATES: 20 JAN 2004 HIGHEST RN 639777-15-4 DICTIONARY FILE UPDATES: 20 JAN 2004 HIGHEST RN 639777-15-4

TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2003

Please note that search-term pricing does apply when conducting ${\tt SmartSELECT}$ searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at: http://www.cas.org/ONLINE/DBSS/registryss.html

L4 28 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN

IN 1,2,3,4-Butanetetrol, (2R,3S)-rel- (9CI)

MF C4 H10 O4

CI COM

Relative stereochemistry.

structures from inventor's work

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):28

L4 28 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN

IN Insulin (9CI)

MF Unspecified

CI PMS, COM, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L4 28 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN

IN D-Ribose (9CI)

MF C5 H10 O5

CI COM

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L4 28 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN

IN Arabinose (8CI, 9CI)

MF C5 H10 O5

CI COM

Relative stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L4 28 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN

IN Somatotropin (9CI)

MF Unspecified

CI PMS, COM, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L4 28 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN

IN D-Glucitol, 6-O-(2,3,4,6-tetra-O-acetyl-.alpha.-D-glucopyranosyl)-, pentaacetate, mixt. with 1-O-(2,3,4,6-tetra-O-acetyl-.alpha.-D-glucopyranosyl)[D-mannitol] pentaacetate (9CI)

MF C30 H42 O20 . C30 H42 O20

CI MXS

CM 1

Absolute stereochemistry.

CM 2

Absolute stereochemistry.

L4 28 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN

IN Xylitol (6CI, 8CI, 9CI)

MF C5 H12 O5

CI COM

L4 28 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN

IN Allose (6CI, 8CI, 9CI)

MF C6 H12 O6

.CI COM

Relative stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L4 28 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN

IN D-Mannitol, 1-0-(2,3,4,6-tetra-0-acetyl-.alpha.-D-glucopyranosyl)-,
 pentaacetate (9CI)

MF C30 H42 O20

CI COM

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L4 28 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN

IN D-Mannitol (9CI)

MF C6 H14 O6

CI COM

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L4 28 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN

IN Altrose (6CI, 7CI, 8CI, 9CI)

MF C6 H12 O6

CI COM

Relative stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L4 28 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN

IN Cyclosporin A (9CI)

SQL 11

MF C62 H111 N11 O12

CI COM

RELATED SEQUENCES AVAILABLE WITH SEQLINK

Absolute stereochemistry. Double bond geometry as shown.

PAGE 1-C

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

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Lyxose (6CI, 8CI, 9CI) C5 H10 O5 IN

MF

CI COM

Relative stereochemistry.

L4 28 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN

IN erythro-2-Pentulose (9CI)

MF C5 H10 O5

CI COM

Relative stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L4 28 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN

IN D-Glucitol, 6-O-(2,3,4,6-tetra-O-acetyl-.alpha.-D-glucopyranosyl)-,
 pentaacetate (9CI)

MF C30 H42 O20

CI COM

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L4 28 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN

IN D-Galactose (9CI)

MF C6 H12 O6

CI COM

Absolute stereochemistry. Rotation (+).

L4 28 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN

IN D-Mannose (9CI)

MF C6 H12 O6

CI COM

Absolute stereochemistry. Rotation (+).

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L4 28 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN

IN D-Glucitol, 4-O-(2,3,4,6-tetra-O-acetyl-.alpha.-D-glucopyranosyl)-,

pentaacetate (9CI)

MF C30 H42 O20

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L4 28 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN

IN D-Xylose (9CI)

MF C5 H10 O5

CI COM

Absolute stereochemistry.

L4 28 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN Ethanol, 2-[ethyl[4-[(4-nitrophenyl)azo]phenyl]amino]- (9CI)
ADDITIONAL NAMES NOT AVAILABLE IN THIS FORMAT
MF C16 H18 N4 O3
CI COM

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L4 28 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN

IN D-Fructose (9CI)

MF C6 H12 O6

CI COM

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L4 28 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN

IN Galactitol (6CI, 8CI, 9CI)

MF C6 H14 O6

CI COM

Relative stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L4 28 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN

IN 1,5-Benzothiazepin-4(5H)-one, 3-(acetyloxy)-5-[2-(dimethylamino)ethyl]-2,3dihydro-2-(4-methoxyphenyl)-, monohydrochloride, (2S,3S)- (9CI)

MF C22 H26 N2 O4 S . C1 H

CI COM

Absolute stereochemistry. Rotation (+).

● HCl

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L4 28 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN

IN D-Glucose (8CI, 9CI)

MF C6 H12 O6 CI COM

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L4 28 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN

IN Ribitol (6CI, 8CI, 9CI)

MF C5 H12 O5

CI COM

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L4 28 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN

IN Gulose (6CI, 7CI, 8CI, 9CI)

MF C6 H12 O6

CI COM

Relative stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L4 28 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN

IN D-Glucitol (9CI)

ADDITIONAL NAMES NOT AVAILABLE IN THIS FORMAT

MF C6 H14 O6

CI COM

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

ALL ANSWERS HAVE BEEN SCANNED

=> fil capl; d que 115; d que 116; d que 117; d que 124; d que 129; d que 131 FILE 'CAPLUS' ENTERED AT 11:20:30 ON 21 JAN 2004 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

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Search

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FILE COVERS 1907 - 21 Jan 2004 VOL 140 ISS 4 FILE LAST UPDATED: 20 Jan 2004 (20040120/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification. $\ \ \,$

'OBI' IS DEFAULT SEARCH FIELD FOR 'CAPLUS' FILE

L5	19	SEA FILE=REGISTRY ABB=ON (GLUCOSE OR GALACTOSE OR FRUCTOSE OR RIBULOSE OR MANNOSE OR RIBOSE OR ARABINOSE OR XYLOSE OR LYXOSE OR ALLOSE OR ALTROSE OR GULOSE)/CN
L6	8	SEA FILE=REGISTRY ABB=ON (ERYTHRITOL OR RIBITOL OR XYLITOL OR GALACTITOL OR GLUCITOL OR MANNITOL)/CN
L7	189461	SEA FILE=CAPLUS ABB=ON L5
L8		SEA FILE=CAPLUS ABB=ON (GLUCOSE/OBI OR GALACTOSE/OBI OR
		FRUCTOSE/OBI OR RIBULOSE/OBI OR MANNOSE/OBI OR RIBOSE/OBI OR
		ARABINOSE/OBI OR XYLOSE/OBI OR LYXOSE/OBI OR ALLOSE/OBI OR
÷		ALTROSE/OBI OR GULOSE/OBI)
L9	30936	SEA FILE=CAPLUS ABB=ON L6
L10	22636	SEA FILE=CAPLUS ABB=ON (ERYTHRITOL/OBI OR RIBITOL/OBI OR
		XYLITOL/OBI OR GALACTITOL/OBI OR GLUCITOL/OBI OR MANNITOL/OBI)
L11		SEA FILE=CAPLUS ABB=ON GLASS/OBI
L13		SEA FILE=CAPLUS ABB=ON GLYCOSIDE#/OBI
L14		SEA FILE=CAPLUS ABB=ON L11(L)L13
L15	1	SEA FILE=CAPLUS ABB=ON (L7 OR L8) AND (L9 OR L10) AND L14
L11		SEA FILE=CAPLUS ABB=ON GLASS/OBI
L12		SEA FILE=CAPLUS ABB=ON VITREOUS/OBI
L13		SEA FILE=CAPLUS ABB=ON GLYCOSIDE#/OBI
L14		SEA FILE=CAPLUS ABB=ON L11(L)L13
L16	1	SEA FILE=CAPLUS ABB=ON L14 AND L12
L5	19	SEA FILE=REGISTRY ABB=ON (GLUCOSE OR GALACTOSE OR FRUCTOSE OR
		RIBULOSE OR MANNOSE OR RIBOSE OR ARABINOSE OR XYLOSE OR LYXOSE
		OR ALLOSE OR ALTROSE OR GULOSE)/CN
Ľ6	8	SEA FILE=REGISTRY ABB=ON (ERYTHRITOL OR RIBITOL OR XYLITOL OR
		GALACTITOL OR GLUCITOL OR MANNITOL)/CN
L7		SEA FILE=CAPLUS ABB=ON L5
L8	246088	SEA FILE=CAPLUS ABB=ON (GLUCOSE/OBI OR GALACTOSE/OBI OR
		FRUCTOSE/OBI OR RIBULOSE/OBI OR MANNOSE/OBI OR RIBOSE/OBI OR

L9 L10 L11 L12 L17	22636 384955 26165	ARABINOSE/OBI OR XYLOSE/OBI OR LYXOSE/OBI OR ALLOSE/OBI OR ALTROSE/OBI OR GULOSE/OBI) SEA FILE=CAPLUS ABB=ON L6 SEA FILE=CAPLUS ABB=ON (ERYTHRITOL/OBI OR RIBITOL/OBI OR XYLITOL/OBI OR GALACTITOL/OBI OR GLUCITOL/OBI OR MANNITOL/OBI) SEA FILE=CAPLUS ABB=ON GLASS/OBI SEA FILE=CAPLUS ABB=ON VITREOUS/OBI SEA FILE=CAPLUS ABB=ON (L7 OR L8) AND (L9 OR L10) AND L11 AND L12
L5	19	SEA FILE=REGISTRY ABB=ON (GLUCOSE OR GALACTOSE OR FRUCTOSE OR RIBULOSE OR MANNOSE OR RIBOSE OR ARABINOSE OR XYLOSE OR LYXOSE
L6	8	OR ALLOSE OR ALTROSE OR GULOSE)/CN SEA FILE=REGISTRY ABB=ON (ERYTHRITOL OR RIBITOL OR XYLITOL OR GALACTITOL OR GLUCITOL OR MANNITOL)/CN
L7 L8		SEA FILE=CAPLUS ABB=ON L5 SEA FILE=CAPLUS ABB=ON (GLUCOSE/OBI OR GALACTOSE/OBI OR FRUCTOSE/OBI OR RIBULOSE/OBI OR MANNOSE/OBI OR RIBOSE/OBI OR ARABINOSE/OBI OR XYLOSE/OBI OR LYXOSE/OBI OR ALLOSE/OBI OR ALTROSE/OBI OR GULOSE/OBI)
L9 L10	30936 22636	SEA FILE=CAPLUS ABB=ON L6 SEA FILE=CAPLUS ABB=ON (ERYTHRITOL/OBI OR RIBITOL/OBI OR
L11	384955	XYLITOL/OBI OR GALACTITOL/OBI OR GLUCITOL/OBI OR MANNITOL/OBI) SEA FILE=CAPLUS ABB=ON GLASS/OBI
L12	26165	SEA FILE=CAPLUS ABB=ON VITREOUS/OBI
L19	21259	SEA FILE=CAPLUS ABB=ON L11(L)DEV/RL
L21	25687	SFA FILE=CADIUS ADD-ON /17 OD 10)/1/ /DEU OD BUU OD DAG OD DAG
	20007	OR PKT OR DMA / PI
L22	4807	SEA FILE=CAPLUS ABB=ON (L9 OR L10) (L) (DEV OR THU OR PAC OR BAC OR PKT OR DMA) /RL
L24	3	SEA FILE=CAPLUS ABB=ON L21 AND L22 AND (L19 OR (L11 AND L12))
		OR PKT OR DMA)/RL SEA FILE=CAPLUS ABB=ON BAC OR PKT OR DMA)/RL SEA FILE=CAPLUS ABB=ON L21 AND L22 AND (L19 OR (L11 AND L12)) Above compensation THE = Thing make
L5	19	SEA FILE=REGISTRY ABB=ON (GLUCOSE OR GALACTOSE OR FRUCTOSE OR FRUCTOSE OR RIBULOSE OR MANNOSE OR RIBOSE OR ARABINOSE OR XYLOSE OR LYXOSE OR ALLOSE OR ALTROSE OR GULOSE)/CN SEA FILE=REGISTRY ABB=ON (ERYTHRITOL OR RIBITOL OR XYLITOL OR Bric = biological GALACTITOL OR GLUCITOL OR MANNITOL)/CN GALACTITOL OR GLUCITOL OR MANNITOL)/CN
L6	8	SEA FILE=REGISTRY ABB=ON (ERYTHRITOL OR RIBITOL OR XYLITOL OR BAC = A degree GALACTITOL OR GLUCITOL OR MANNITOL)/CN
L7	103401	SEA FIGEELAPLUS ARREON 1.5
L8		SEA FILE=CAPLUS ABB=ON (GLUCOSE/OBI OR GALACTOSE/OBI OR FRUCTOSE/OBI OR RIBULOSE/OBI OR MANNOSE/OBI OR RIBOSE/OBI OR ARABINOSE/OBI OR XYLOSE/OBI OR LYXOSE/OBI OR ALLOSE/OBI OR ALTROSE/OBI OR GULOSE/OBI) SEA FILE=CAPLUS ABB=ON L6 SEA FILE=CAPLUS ABB=ON (ERYTHRITOL/OBI OR RIBITOL/OBI OR XYLITOL/OBI OR GALACTITOL/OBI OR GLUCITOL/OBI OR MANNITOL/OBI)
L9	30936	SEA FILE=CAPLUS ABB=ON L6
L10		SEA FILE=CAPLUS ABB=ON (ERYTHRITOL/OBI OR RIBITOL/OBI OR
		XYLITOL/OBI OR GALACTITOL/OBI OR GLUCITOL/OBI OR MANNITOL/OBI)
L11	384955	SEA FILE=CAPLUS ABB=ON GLASS/OBI
L25		SEA FILE=CAPLUS ABB=ON (L7 OR L8)(L)L11 AND (L9 OR L10)(L)L11
L26	28616	SEA FILE=CAPLUS ABB=ON L11(W)TRANSITION#/OBI
L27		SEA FILE=CAPLUS ABB=ON L25 NOT L26
L28		SEA FILE=CAPLUS ABB=ON SUGAR/OBI(W)L11
L29		SEA FILE=CAPLUS ABB=ON L27 AND L28
	_	The same of the sa

L5

L6	8	SEA FILE=REGISTRY ABB=ON (ERYTHRITOL OR RIBITOL OR XYLITOL OR												
L7	189461	GALACTITOL OR GLUCITOL OR MANNITOL)/CN SEA FILE=CAPLUS ABB=ON L5												
F8	246088													
		FRUCTOSE/OBI OR RIBULOSE/OBI OR MANNOSE/OBI OR RIBOSE/OBI OR												
		ARABINOSE/OBI OR XYLOSE/OBI OR LYXOSE/OBI OR ALLOSE/OBI OR												
		ALTROSE/OBI OR GULOSE/OBI)												
L9		SEA FILE=CAPLUS ABB=ON L6												
L10	22636	SEA FILE=CAPLUS ABB=ON (ERYTHRITOL/OBI OR RIBITOL/OBI OR												
		XYLITOL/OBI OR GALACTITOL/OBI OR GLUCITOL/OBI OR MANNITOL/OBI)												
L11	384955	SEA FILE=CAPLUS ABB=ON GLASS/OBI												
L21	25687	SEA FILE=CAPLUS ABB=ON (L7 OR L8)(L)(DEV OR THU OR PAC OR BAC												
		OR PKT OR DMA)/RL												
L22	4807	SEA FILE=CAPLUS ABB=ON (L9 OR L10)(L)(DEV OR THU OR PAC OR												
		BAC OR PKT OR DMA)/RL												
L23	17	SEA FILE=CAPLUS ABB=ON L21 AND L22 AND L11												
L26	28616	SEA FILE=CAPLUS ABB=ON L11(W)TRANSITION#/OBI												
L30	15	SEA FILE=CAPLUS ABB=ON L23 AND PHARMAC?/SC,SX												
L31	4	SEA FILE=CAPLUS ABB=ON L30 NOT L26												
	_													

=> s (115 or 116 or 117 or 124 or 129 or 131) not 13 L76 8 (L15 OR L16 OR L17 OR L24 OR L29 OR L31) NOT (L3) meridually

=> fil wpids; d que 147; d que 150; d que 154; d que 160 FILE 'WPIDS' ENTERED AT 11:20:39 ON 21 JAN 2004 COPYRIGHT (C) 2004 THOMSON DERWENT

FILE LAST UPDATED: 20 JAN 2004 <20040120/UP>
MOST RECENT DERWENT UPDATE: 200405 <200405/DW>
DERWENT WORLD PATENTS INDEX SUBSCRIBER FILE, COVERS 1963 TO DATE

- >>> NEW WEEKLY SDI FREQUENCY AVAILABLE --> see NEWS <
- >>> PATENT IMAGES AVAILABLE FOR PRINT AND DISPLAY <<<
- >>> FOR A COPY OF THE DERWENT WORLD PATENTS INDEX STN USER GUIDE,
 PLEASE VISIT:
 http://www.stn-international.de/training_center/patents/stn_guide.pdf <<</pre>
- >>> FOR DETAILS OF THE PATENTS COVERED IN CURRENT UPDATES, SEE http://thomsonderwent.com/coverage/latestupdates/
- >>> FOR INFORMATION ON ALL DERWENT WORLD PATENTS INDEX USER GUIDES, PLEASE VISIT: http://thomsonderwent.com/support/userguides/ <<<
- >>> ADDITIONAL POLYMER INDEXING CODES WILL BE IMPLEMENTED FROM DERWENT UPDATE 200403.

 THE TIME RANGE CODE WILL ALSO CHANGE FROM 018 TO 2004.

 SDIS USING THE TIME RANGE CODE WILL NEED TO BE UPDATED.

 FOR FURTHER DETAILS: http://thomsonderwent.com/chem/polymers/ <<<

L39	34922	SEA FILE=WPIDS ABB=ON (GLUCOSE OR GALACTOSE OR FRUCTOSE OR
		RIBULOSE OR MANNOSE OR RIBOSE OR ARABINOSE OR XYLOSE OR LYXOSE
		OR ALLOSE OR ALTROSE OR GULOSE)
L40	7031	SEA FILE-WPIDS ABB-ON (ERYTHRITOL OR RIBITOL OR XYLITOL OR
		GALACTITOL OR GLUCITOL OR MANNITOL)
L42	11966	SEA FILE=WPIDS ABB=ON SACCHARIDE# OR MONOSACCHARIDE#
L43	37098	SEA FILE=WPIDS ABB=ON POLYALCOHOL# OR POLY ALCOHOL# OR

```
POLYOL#
         355867 SEA FILE=WPIDS ABB=ON GLASS
L44
           6474 SEA FILE=WPIDS ABB=ON VITREOUS
L45
              4 SEA FILE-WPIDS ABB-ON (L39 OR L42) AND (L40 OR L43) AND L44
L47
                AND L45
           4829 SEA FILE=WPIDS ABB=ON GLYCOSIDE#
L41
L44
         355867 SEA FILE=WPIDS ABB=ON
                                       GLASS
L45
           6474 SEA FILE-WPIDS ABB-ON
                                       VITREOUS
L48
         241873 SEA FILE=WPIDS ABB=ON MODIF?
L49
         401338 SEA FILE-WPIDS ABB=ON ALTER?
L50
              1 SEA FILE=WPIDS ABB=ON ((L48 OR L49))(5A)L41 AND L44 AND L45
L39
          34922 SEA FILE=WPIDS ABB=ON (GLUCOSE OR GALACTOSE OR FRUCTOSE OR
                RIBULOSE OR MANNOSE OR RIBOSE OR ARABINOSE OR XYLOSE OR LYXOSE
                OR ALLOSE OR ALTROSE OR GULOSE)
L40
           7031 SEA FILE=WPIDS ABB=ON
                                       (ERYTHRITOL OR RIBITOL OR XYLITOL OR
                GALACTITOL OR GLUCITOL OR MANNITOL)
L41
           4829 SEA FILE=WPIDS ABB=ON GLYCOSIDE#
L42
          11966 SEA FILE=WPIDS ABB=ON
                                       SACCHARIDE# OR MONOSACCHARIDE#
          37098 SEA FILE=WPIDS ABB=ON POLYALCOHOL# OR POLY ALCOHOL# OR
L43
                POLYOL#
L44
         355867 SEA FILE=WPIDS ABB=ON
                                       GLASS
L45
           6474 SEA FILE=WPIDS ABB=ON VITREOUS
L48
         241873 SEA FILE=WPIDS ABB=ON MODIF?
L49
         401338 SEA FILE-WPIDS ABB-ON ALTER?
L51
           3209 SEA FILE=WPIDS ABB=ON (((L48 OR L49)(5A)L41) OR ((L39 OR L42)
                AND (L40 OR L43)))
L52
             88 SEA FILE=WPIDS ABB=ON L44 AND L51
L54
              3 SEA FILE=WPIDS ABB=ON B/DC AND L52 AND L45
L39
          34922 SEA FILE=WPIDS ABB=ON
                                       (GLUCOSE OR GALACTOSE OR FRUCTOSE OR
                RIBULOSE OR MANNOSE OR RIBOSE OR ARABINOSE OR XYLOSE OR LYXOSE
                OR ALLOSE OR ALTROSE OR GULOSE)
L40
           7031 SEA FILE=WPIDS ABB=ON
                                       (ERYTHRITOL OR RIBITOL OR XYLITOL OR
                GALACTITOL OR GLUCITOL OR MANNITOL)
           4829 SEA FILE=WPIDS ABB=ON GLYCOSIDE#
L41
          11966 SEA FILE=WPIDS ABB=ON SACCHARIDE# OR MONOSACCHARIDE#
L42
          37098 SEA FILE=WPIDS ABB=ON POLYALCOHOL# OR POLY ALCOHOL# OR
L43
                POLYOL#
L44
         355867 SEA FILE-WPIDS ABB-ON GLASS
L48
         241873 SEA FILE=WPIDS ABB=ON MODIF?
L49
         401338 SEA FILE-WPIDS ABB-ON ALTER?
L51
           3209 SEA FILE=WPIDS ABB=ON (((L48 OR L49)(5A)L41) OR ((L39 OR L42)
                AND (L40 OR L43)))
L52
             88 SEA FILE=WPIDS ABB=ON
                                       L44 AND L51
L53
             55 SEA FILE=WPIDS ABB=ON B/DC AND L52
L55
           4803 SEA FILE=WPIDS ABB=ON BIOACTIV?
L56
          36826 SEA FILE-WPIDS ABBEON ANTIBIOTIC? OR ANTIFUNG? OR ANTIMYCOT?
L57
             17 SEA FILE=WPIDS ABB=ON L53 AND (L55 OR L56)
L59
         134661 SEA FILE=WPIDS ABB=ON MATRIX OR MATRICES
L60
              9 SEA FILE=WPIDS ABB=ON L57 AND L59
=> s (147 or 150 or 154 or 160)
L77
           12 (L47 OR L50 OR L54 OR L60)
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=> fil DRUGU, PASCAL, JICST-EPLUS, BIOTECHNO, ESBIOBASE, BIOTECHDS, BIOSIS, TOXCENTER FILE 'DRUGU' ENTERED AT 11:20:49 ON 21 JAN 2004 COPYRIGHT (C) 2004 THOMSON DERWENT

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FILE 'TOXCENTER' ENTERED AT 11:20:49 ON 21 JAN 2004 COPYRIGHT (C) 2004 ACS

=> d que 171; d que 173; d que 174 813351 SEA (GLUCOSE OR GALACTOSE OR FRUCTOSE OR RIBULOSE OR MANNOSE OR RIBOSE OR ARABINOSE OR XYLOSE OR LYXOSE OR ALLOSE OR ALTROSE OR GULOSE) L62 56763 SEA SACCHARIDE# OR MONOSACCHARIDE# L63 54258 SEA (ERYTHRITOL OR RIBITOL OR XYLITOL OR GALACTITOL OR GLUCITOL OR MANNITOL) L64 47095 SEA POLYOL# OR POLYALCOHOL# L66 255586 SEA GLASS L67 532013 SEA MATRIX OR MATRICES L68 32215 SEA VITREOUS L71 4 SEA (L61 OR L62) AND (L63 OR L64) AND L66 AND (L67 OR L68)

L65	497	SEA	GLYCOSIDE#(5A)(MODIF? OR ALTER?)
L66	255586	SEA	GLASS
T.73	1	SEA	1.65 AND 1.66

L61 813351 SEA (GLUCOSE OR GALACTOSE OR FRUCTOSE OR RIBULOSE OR MANNOSE OR RIBOSE OR ARABINOSE OR XYLOSE OR LYXOSE OR ALLOSE OR ALTROSE OR GULOSE)

L62 56763 SEA SACCHARIDE# OR MONOSACCHARIDE#

L63 54258 SEA (ERYTHRITOL OR RIBITOL OR XYLITOL OR GALACTITOL OR

54258 SEA (ERYTHRITOL OR RIBITOL OR XYLITOL OR GALACTITOL OF GLUCITOL OR MANNITOL)

L64 47095 SEA POLYOL# OR POLYALCOHOL#

L66 255586 SEA GLASS L69 197912 SEA BIOACTIV?

L70 6763559 SEA PHARMAC? OR DRUG#

L74 19 SEA (L61 OR L62) (L) (L63 OR L64) (L) L66 (L) (L69 OR L70)

=> s 171 or 173 or 174

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L78 23 L71 OR L73 OR L74
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=> dup rem 176,178,177

FILE 'CAPLUS' ENTERED AT 11:21:14 ON 21 JAN 2004

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FILE 'TOXCENTER' ENTERED AT 11:21:14 ON 21 JAN 2004 COPYRIGHT (C) 2004 ACS

FILE 'WPIDS' ENTERED AT 11:21:14 ON 21 JAN 2004
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PROCESSING COMPLETED FOR L76
PROCESSING COMPLETED FOR L78
PROCESSING COMPLETED FOR L77
L79 37 DUP REM L76 L78 L77 (6 DUPLICATES REMOVED)

ANSWERS '1-8' FROM FILE CAPLUS
ANSWERS '9-14' FROM FILE DRUGU
ANSWERS '15-16' FROM FILE PASCAL
ANSWER '17' FROM FILE JICST-EPLUS
ANSWERS '18-19' FROM FILE BIOTECHNO
ANSWERS '20-22' FROM FILE BIOTECHDS
ANSWERS '23-25' FROM FILE BIOSIS
ANSWER '26' FROM FILE TOXCENTER
ANSWERS '27-37' FROM FILE WPIDS

=> d ibib ab hitrn 1-8; d iall 9-37; fil hom

L79 ANSWER 1 OF 37 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 1

ACCESSION NUMBER:

2003:334871 CAPLUS 138:358452

DOCUMENT NUMBER: TITLE:

Kit for the preparation of a pharmaceutical

composition

INVENTOR(S):

Lintz, Frank-Christophe; Keller, Manfred

PATENT ASSIGNEE(S): Pari G.m.b.H., Germany SOURCE: PCT Int. Appl., 31 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT:

: 1

PATENT INFORMATION:

Krishnan 09/923023 Page 23

```
PATENT NO.
                     KIND DATE
                                          APPLICATION NO. DATE
                     ----
                                          -----
     _____
                    A1 20030501
                                          WO 2002-EP11918 20021024
    WO 2003035030
        W: AU, CA, JP, MX, NZ, RU, US
        RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT,
            LU, MC, NL, PT, SE, SK, TR
                                       EP 2001-124384
                                                        A 20011024
PRIORITY APPLN. INFO.:
    The invention relates to pharmaceutical kits for the prepn. of liq.
    compns. which can be administered to humans as aerosols for the diagnosis,
    prevention or treatment of human diseases. A kit according to the
    invention comprises a solid compn. and a sterile aq. liq. capable of
    dispersing or dissolving the solid compn. to form a liq. compn. which can
    be aerosolized. The solid compn. of the kit comprises one or more active
    compds. and a water-sol., low mol. wt. excipient. Preferably, the solid
    compn. comprises a sugar or a sugar alc., such as mannitol, lactose, or
    glucose. For example, an aq. soln. contq. 5.2% mannitol, 8 .mu.g/mL
     formoterol fumarate, and 0.1% Polysorbate 80 was prepd., sterilized, and
     lyophilized (2 mL/vial). Upon addn. of 1 mL of sterile water, the
     lyophylizate was capable of dissolving in a relatively short time due to
    the presence of surfactant. In order to further reduce dissoln. time of
    lyophylizate, the amt. of surfactant was increased. The dissoln. times
     for 0.1%, 0.2%, and 0.5% Polysorbate 80 were 73, 40, and 30 s, resp.
    reconstituted soln. could be administered by nebulization.
    50-99-7, D-Glucose, biological studies 69-65-8
TΤ
     D-Mannitol
    RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (kits for prepn. of aerosolized liq. compns. of agents unstable in aq.
       medium for diagnosis and therapy)
REFERENCE COUNT:
                              THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS
                              RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
L79 ANSWER 2 OF 37 CAPLUS COPYRIGHT 2004 ACS on STN
                        2003:991322 CAPLUS
ACCESSION NUMBER:
DOCUMENT NUMBER:
                        140:47515
                        Modified-release, multiple unit drug delivery systems
TITLE:
                        comprising rate controlling polymers
                        Kumar, Pratik; Jain, Girish Kumar; Rampal, Ashok;
INVENTOR(S):
                        Nithiyanandam, Ravikumar; Ramakrishnan, Sankar;
                        Raghuvanshi, Rajeev Singh
PATENT ASSIGNEE(S):
                        Ranbaxy Laboratories Limited, India
                        PCT Int. Appl., 54 pp.
SOURCE:
                        CODEN: PIXXD2
DOCUMENT TYPE:
                        Patent
LANGUAGE:
                        English .
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
    PATENT NO.
                    KIND DATE
                                         APPLICATION NO. DATE
                    ____
                           20031218
                                         WO 2003-IB2186
                                                         20030609
    WO 2003103637
                     A2
        W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
            CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
            GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
            LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM,
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WO 2003103637 A2 20031218 WO 2003-IB2186 20030609

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO::

IN 2002-DE617 A 20020607
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IN 2002-DE1157
                A 20021115
IN 2003-DE234
                A 20030306
```

AB The invention relates to novel modified-release multiple unit systems, and methods of prepg. these systems, which can be easily compressed into tablets or filled into capsules or sachets without affecting the desired release characteristics of the pharmaceutical active ingredients incorporated within the systems. Each unit includes at least one core having an outer surface, a first coating layer surrounding at least a portion of the outer surface of the core and having an outer surface, one or more rate controlling polymers, and one or more active pharmaceutical ingredients. The coating layer includes one or both the active pharmaceutical ingredients and the rate controlling polymers. The tablet may further include an outer layer on the outer surface of the unit which includes a material that is one or both of elastic and compressible. The material may be a wax materials, such as polyethylene glycol (PEG). For example, modified-release multiple units (pellets) were prepd. contg. (i) non-pariel seed 65 mg, as an inert core, (ii) venlafaxine-HCl 171.0 mg, magnesium stearate 13.5 mg, colloidal silica 19.7 mg, hydroxypropyl Me cellulose 13.5 mg, and water, as a drug layer, (iii) Et cellulose 93 mg, hydroxypropyl Me cellulose 24 mg, triacetin 1% of total polymer, mg as a rate controlling layer, and (iv) polyethylene glycol (PEG) 6000, as a wax layer. Pellets 473 mg, silicified microcryst. cellulose 288 mg, PEG 6000 71 mg, Crospovidone 102 mg, and magnesium cellulose were compressed into sustained-release tablets.

TΤ 50-99-7, D-Glucose, biological studies 69-65-8

, D-Mannitol 87-99-0, Xylitol

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (cores; modified-release, multiple unit drug delivery systems comprising rate controlling polymers)

L79 ANSWER 3 OF 37 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

2002:449491 CAPLUS

DOCUMENT NUMBER:

137:37634

TITLE:

Absorbing agents and cover layer which is impermeable

to active substances and which contains

channel-formers or removable protective layer of a

transdermal therapeutic system Beier, Cornelia; Kibele, Ralf

PATENT ASSIGNEE(S):

Hexal Ag, Germany

SOURCE:

PCT Int. Appl., 41 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

INVENTOR(S):

Patent

LANGUAGE:

German

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA	TENT	NO.	ND	DATE								DATE					
WO 2002045700 WO 2002045700									0 20				2001	1205			
	W:	AE, CO, GM, LS, RO, UZ, GH,	AG, CR, HR, LT, RU, VN, GM,	AL, CU, HU, LU, SD, YU, KE,	AM, CZ, ID, LV, SE, ZA, LS,	AT, DE, IL, MA, SG, ZW, MW,	AU, DK, IN, MD, SI, AM, MZ,	AZ, DM, IS, MG, SK, AZ, SD,	DZ, JP, MK, SL, BY, SL,	EC, KE, MN, TJ, KG, SZ,	EE, KG, MW, TM, KZ, TZ,	ES, KP, MX, TR, MD, UG,	FI, KR, MZ, TT, RU, ZM,	GB, KZ, NO, TZ, TJ, ZW,	GD, LC, NZ, UA, TM	GE, LK, PL, UG,	GH, LR, PT, US,
AU	1006 2002 1339	CY, BF, 0852 0296 397	DE, BJ, 18	DK, CF, A: A:	ES, CG, 1 5 2	FI, CI, 2002	FR, CM, 0620 0618 0903	GB, GA,	GR, GN, D: A' E:	IE, GQ, E 200 U 200 P 200	IT, GW, 00-1: 02-2: 01-9:	LU, ML, 0060: 9618 9051:	MC, MR, 852	NL, NE, 2000 2001	PT, SN, 1206 1205 1205	SE, TD,	TR, TG

```
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
                                         DE 2000-10060852 A 20001206
PRIORITY APPLN. INFO.:
                                         WO 2001-EP14280 W 20011205
     The invention relates to a cover layer which is impermeable to active
AB
     substances and/or a removable protective layer of a transdermal
     therapeutic system, these layers consisting of a thermoplastic film and
     contg. either absorption agents and channel forming agents directly or
     being coated with a polymer support (thermoplastic) contg. these
     substances. Said polymer support can be applied directly during prodn.,
     either over the entire film or in patterns. The thermoplastic film that
     is used and the polymer support can consist of identical or different
     materials.
ΙT
     50-70-4, Sorbitol, biological studies 50-99-7,
     Glucose, biological studies 57-48-7, Fructose,
     biological studies 59-23-4, Galactose, biological
     studies 69-65-8, Mannitol 87-99-0,
     Xylitol 149-32-6, Erythrol 488-81-3,
     Ribitol 608-66-2, Dulcitol 3458-28-4,
    Mannose
     RL: TEM (Technical or engineered material use); THU (Therapeutic
     use); BIOL (Biological study); USES (Uses)
        (absorbing agents and cover layer impermeable to active substances and
        contg. channel-formers or removable protective layer of a transdermal
        therapeutic system)
L79 ANSWER 4 OF 37 CAPLUS COPYRIGHT 2004 ACS on STN
                      2001:868791 CAPLUS
ACCESSION NUMBER:
DOCUMENT NUMBER:
                         136:2455
TITLE:
                         A sensor membrane, a method for the preparation
                         thereof, a sensor and a layered membrane structure for
                         such sensor
                         Clausen, Lydia Dahl
INVENTOR(S):
PATENT ASSIGNEE(S):
                         Radiometer Medical A/S, Den.
                         PCT Int. Appl., 38 pp.
SOURCE:
                         CODEN: PIXXD2
DOCUMENT TYPE:
                         Patent
LANGUAGE:
                         English
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
     PATENT NO.
                      KIND DATE
                                            APPLICATION NO. DATE
                            -----
                            20011129
     WO 2001090733
                       A1
                                            WO 2001-DK358
                                                             20010523
         W: JP, US
         RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
             PT, SE, TR
     EP 1292823
                            20030319
                                            EP 2001-933650
                                                             20010523
                       A1
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, FI, CY, TR
     JP 2003534548
                                            JP 2001-586449
                      T2
                            20031118
                                                             20010523
     US 2003070548
                                            US 2002-301035
                            20030417
                                                             20021121
                       Α1
PRIORITY APPLN. INFO.:
                                         DK 2000-819
                                                       A 20000523
                                         WO 2001-DK358
                                                          W 20010523
OTHER SOURCE(S):
                         MARPAT 136:2455
    A membrane for a sensor, a method for the prepn. thereof, a layered
    membrane structure and a sensor for anal. measurements which require
     controlled analyte permeability are disclosed. The membrane, layered
     structure and sensor may be used for biol., physiol. and chem.
    measurements, however, are esp. applicable for electrochem. measurements of glucose, lactate, urea and creatinine. The membrane comprises at least
     one polymer material, at least one surfactant, and at least one
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hydrophilic compd. in admixt. to provide a membrane structure in which micelles of hydrophilic compd. lined with thin layers of surfactant are

randomly distributed in the bulk polymer of the membrane. Upon conditioning of the membrane, a structure of a percolating network of pores lined with surfactant is formed which has excellent permeability properties. The membrane has the addnl. advantage of a proper adhesion to polymer encapsulant structures. The membrane is prepd. from a mixt. of at least one polymer material, at least one surfactant, at least one hydrophilic compd. and at least one solvent. A glucose sensor having electrodes and a glucose oxidase layer was prepd. in which the outer membrane was prepd. from a soln. of polyvinyl chloride, trimethylnonyl-triethylene glycol, and diethylene glycol in tetrahydrofurane and cyclohexanone.

IT 50-70-4D, Sorbitol, fatty acid esters

> RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses)

(membrane contg.; sensor membrane and its prepn. and sensors having layered membrane structure)

TΨ 50-99-7, D-Glucose, analysis

> RL: ANT (Analyte); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(sensor membrane and its prepn. and sensors having layered membrane structure)

REFERENCE COUNT:

5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L79 ANSWER 5 OF 37 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2001:676229 CAPLUS

DOCUMENT NUMBER:

135:216017

TITLE:

Fatty acid-silicate polymer containing composition

INVENTOR(S): Konishi, Jin-emon

PATENT ASSIGNEE(S):

Nippon Zoki Pharmaceutical Co., Ltd., Japan

SOURCE:

Eur. Pat. Appl., 9 pp.

CODEN: EPXXDW

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

	PAT	CENT	NO.		KI	ND	DATE			APPLICATION NO.						DATE					
	EP	1132	095		A1		20010912			E	P 20	01-1	03553	3	20010219						
		R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,			
			ΙE,	SI,	LT,	LV,	FI,	RO													
	CA	2337	484		A	A	2001	0818		C	A 20	01-2	33748	84	2001	0216					
	CN	1312	080		Α		2001	0912		C	N 20	01-1	04613	3	2001	0216					
	JP	2001	3025	49	A	2	2001	1031		J	P 20	01-3	9809		2001	0216					
	US	2003	0180	11	A.	1	2003	0123		U	S 20	01-7	8800	7	2001	0216					
PRIORITY APPLN. INFO.:								Α.		JP 2	000-	4132	7	Α	2000	0218					
AB	An	obje	ct of	f the	e pro	esen	t in	vent:	ion :	is t	o pr	ovid	e a	comp	on. f	or e	nhan	cing			
	the	e pha	rmac	ol. a	acti	vity	of	a wat	ter-	sol.	sil	icat	e poi	lyme	er. '	The p	phari	naco.			
	con	non.	of th	he pi	rese	nt ī	nven	tion	con	tain.	s a	wate	r-so	ء . آ	silica	ate i	oolvi	ner a			

ol. compn. of the present invention contains a water-sol. silicate polymer and a satd. fatty acid as effective ingredients and is useful as a medicine such as anti-allergic agent. It is found that the combination of a satd. fatty acid and a water-sol. silicate polymer produces an effect to enhance the pharmacol. activity of a water-sol. silicate polymer. Since the compn. of the present invention can suppress histamine release induced by a structural change in cell membrane of the mast cell, the compn. has an excellent organism maintaining function such as cell protecting action and, therefore, is useful as a medicine such as anti-allergic agent.

IT 50-70-4, Sorbitol, biological studies 50-99-7,

Glucose, biological studies 57-48-7, Fructose,

biological studies 59-23-4, Galactose, biological

studies 69-65-8, Mannitol

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

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(anti-allergy compns. contg. fatty acids and silicate polymers and saccharides)

RECORD. ALL CITATIONS

THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L79 ANSWER 6 OF 37 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1998:568970 CAPLUS

DOCUMENT NUMBER: 129:200179

TITLE: Methods and compns. for detection of analytes using

color changes that occur in biopolymeric material in

response to selective binding of analytes

INVENTOR(S): Stevens, Raymond; Quan, Cheng

PATENT ASSIGNEE(S): The Regents of the University of California, USA

SOURCE: PCT Int. Appl., 121 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

REFERENCE COUNT:

Patent English

LANGUAGE: Enc FAMILY ACC. NUM. COUNT: 11

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE
WO 9836263 A1 19980820 WO 1998-US2777 19980213

W: AU, CA, JP

RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE

AU 9861627 A1 19980908 AU 1998-61627 19980213 EP 1007943 A1 20000614 EP 1998-906389 19980213

R: CH, DE, FR, GB, LI

PRIORITY APPLN. INFO.: US 1997-38383P P 19970214 WO 1998-US2777 W 19980213

AB The present invention relates to methods and compns. for the direct detection of analytes using color changes that occur in biopolymeric material in response to selective binding of analytes. The invention provides biopolymeric materials comprising a plurality of polymd. self-assembling monomers and one or more protein ligands, wherein the biopolymeric materials change color in the presence of analyte. In some embodiments, the protein ligands are selected from the group consisting of peptides, proteins, antibodies, receptors, channels, and combinations thereof, although the present invention contemplates all protein ligands. In specific embodiments, the antibodies of the presently claimed invention are directed against Chlamydia.

IT 50-70-4, D-Glucitol, analysis 59-23-4,

Galactose, analysis

RL: ANT (Analyte); ARU (Analytical role, unclassified); PRP (Properties); ANST (Analytical study)

(methods and compns. for detection of analytes using color changes that occur in biopolymeric material in response to selective binding of analytes)

IT 50-99-7, D-Glucose, biological studies

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(methods and compns. for detection of analytes using color changes that occur in biopolymeric material in response to selective binding of analytes)

REFERENCE COUNT:

9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L79 ANSWER 7 OF 37 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1995:864936 CAPLUS

DOCUMENT NUMBER: 123:265006

PITTIF: Filtoring mar

TITLE: Filtering materials for air filters

INVENTOR(S): Sumioka, Masayuki; Ootsuka, Kazuhiko; Asahi, Tsukasa

PATENT ASSIGNEE(S): Nitta Kk, Japan

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SOURCE:
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Jpn. Kokai Tokkyo Koho, 9 pp.

CODEN: JKXXAF

DOCUMENT TYPE: LANGUAGE: Patent Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

JP 07194911 A2 19950801 JP 1994-283181 19941117
PRIORITY APPLN. INFO:: JP 1993-298243 19931129

AB Filters having adhered polyhydric alcs. or their derivs. are claimed. Preferably, the alcs. (esp. polyhydric alcs. having .gtoreq.2 asym. C) or their derivs. are contained in amts. of 0.2-23% of the filter wt., and furthermore the filters are made from glass fibers of diam. 0.2-12 .mu.m by wet-papermaking process. Air filters comprising the materials are also claimed. The filters are useful for trapping of B.

IT 50-70-4, D-Sorbitol, uses 50-99-7, Glucose, uses 57-48-7, D-Fructose, uses 69-65-8, D-

Mannitol 608-66-2, Galactitol

RL: **DEV** (Device component use); MOA (Modifier or additive use); USES (Uses)

(glass fiber filters coated with polyhydric alc. (derivs.) for boron trapping and air filters)

L79 ANSWER 8 OF 37 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1985:100687 CAPLUS

DOCUMENT NUMBER: 102:100687

TITLE: Bioavailability of sulfamethoxazole from sugar

glass dispersions

AUTHOR(S): Meshali, M.; Ghanem, A.; Ibraheem, Y. CORPORATE SOURCE: Fac. Pharm., Univ. Mansoura, Egypt

SOURCE: Journal of Drug Research (1983), 14(1-2), 239-42

CODEN: JDGRAX; ISSN: 0368-1866

DOCUMENT TYPE: Journal LANGUAGE: English

AB The bioavailability of sulfamethoxazole (I) [723-46-6] from sugar glass dispersions was detd. in humans by using the urinary excretion method. Glucose [50-99-7] and sorbitol [50-70-4] were used as sugars. The solid dispersions in a 1:1 drug-sugar ratio were prepd. The cumulative amts. of unmetabolized I excreted in urine following the oral administration of free I, glucose-I and sorbitol-I dispersions were measured. Values of std. deviations show that there is no interindividual variation in the absorption of I. Solid dispersions of I with sugars can markedly enhance the rate and extent of its absorption in humans.

IT 50-70-4, biological studies 50-99-7, biological studies RL: BIOL (Biological study)

(glass dispersions contg., sulfamethoxazole bioavailability from)

L79 ANSWER 9 OF 37 DRUGU COPYRIGHT 2004 THOMSON DERWENT on STN DUPLICATE 2

ACCESSION NUMBER: 2002-19307 DRUGU P G

TITLE: A biodegradable injectable implant sustains systemic and

ocular delivery of an aldose reductase inhibitor and ameliorates biochemical changes in a galactose-fed rat model

for diabetic complications.

AUTHOR: Aukunuru J V; Sunkara G; Ayalasomayajula S P; DeRuiter J;

Clark R C; Kompella U B

CORPORATE SOURCE: Univ.Nebraska; Univ.Auburn LOCATION: Omaha, Neb.; Auburn, Ala., USA

09/923023 Krishnan Page 29

SOURCE:

Pharm.Res. (19, No. 3, 278-85, 2002) 7 Fig. 1 Tab. 30 Ref.

CODEN: PHREEB ISSN: 0724-8741

AVAIL. OF DOC.: Department of Pharmaceutical Sciences, University of Nebraska

Medical Center, Omaha, Nebraska 68198-6025, U.S.A. (U.B.K.).

(e-mail: ukompell@unmc.edu). English

LANGUAGE:

Journal

DOCUMENT TYPE:

ABSTRACT:

Exposure to benzoylamino phenylsulfonyl glycine (BAPSG) implant, fabricated with poly (DL-lactic-co-glycolic acid) (PLGA), reduced galactitol levels and vascular endothelial growth factor (VEGF) expression in retinal pigment epithelial ARPE-19 cells in vitro. Implant fabrication decreased the ***glass*** transition temperature of the polymer, but did not affect the melting point of the drug. The in vivo sustained drug release in plasma and ocular tissues showed correlation with in vitro release. S.c. injection of BAPSG implant reduced ***galactitol*** levels, GSH depletion, VEGF secretion and cataract score in ***qalactose*** -fed rats in vivo. Results indicate the efficacy of BAPSG implant in normalizing short-term end-points in galactose-fed rat model for diabetic complications.

SECTION HEADING: P Pharmacology

G Galenics

CLASSIF. CODE:

8 Pharmacokinetics

29 Pharmaceutics

CONTROLLED TERM:

[01]

DR0033832 *RN; DIABETES *OC; CARBOHYDRATE-METAB.DISORDER *OC;

PANCREOPATHY *OC; GALACTITOL *FT; RETINA *FT; IN-VITRO *FT;

TEMPERATURE *FT; IN-VIVO *FT; RELEASE *FT; RATE *FT;

BLOOD-PLASMA *FT; CONC. *FT; S.C. *FT; GSH *FT; RAT *FT; EYE

*FT; INJECTION *FT; LAB.ANIMAL *FT; PH *FT; OC *FT

FIELD AVAIL .:

AB; LA; CT

FILE SEGMENT:

Literature

ANSWER 10 OF 37 DRUGU COPYRIGHT 2004 THOMSON DERWENT on STN

ACCESSION NUMBER: 2003-45393 DRUGU

TITLE:

An investigation into the thermal and analytical techniques

used in the development of lyophilised protein

pharmaceuticals.

AUTHOR:

McMahon D L M; Craig D Q M; Kett V L; Ward K R

CORPORATE SOURCE: Univ.Queens; Biopharma-Tech.

LOCATION:

SOURCE:

Belfast; Winchester, U.K.

J.Pharm.Pharmacol. (55, Suppl., S25, 2003) 1 Tab. 2 Ref.

ISSN: 0022-3573 CODEN: JPPMAB

AVAIL. OF DOC.:

School of Pharmacy, Queens University Belfast, 97 Lisburn

Road, Belfast BT9 7BL, Northern Ireland.

LANGUAGE:

English

DOCUMENT TYPE:

Journal

ABSTRACT:

Modulated temperature DSC, freeze-drying microscopy, DTA and freezing resistance analysis were used to evaluate frozen excipient (dextran (70 k), dextran (9500), PEG (1000), PEG (10 k) and mannitol glucose) solutions with regard to glass transition (Tg) and collapse temperatures (Tc). Excipients were included in formulations of a model protein, lactate dehydrogenase. There was some correlation between Tg and collapse range of the solutions tested, with different techniques being more appropriate for some samples. Structural differences between excipients meant Krishnan 09/923023

Page 30

that correlation between thermal softening and physical collapse was better in the case of high molecular weight polymers. Thermal stabilization by excipients will not always ensure protection of the protein. (conference abstract: 140th British **Pharmaceutical** Conference, Harrogate, U.K., September, 15-17, 2003). (No EX).

SECTION HEADING: G Galenics

CLASSIF. CODE: 29 Pharmaceutics

CONTROLLED TERM:

IN-VITRO *FT; AUXILIARY-INGREDIENT *FT; STABILITY *FT;

PHARMACEUTICS *FT

[01] DEXTRAN *OC; DEXTRAN *RN; OC *FT

[02] POLYETHYLENE-GLYCOL *OC; PEG *RN; OC *FT

[03] MANNITOL *OC; GLUCOSE *OC; MANNITOL *RN; DIURETICS *FT;

LAXATIVES *FT; OC *FT

CAS REGISTRY NO.: 69-65-8
FIELD AVAIL.: AB; LA; CT
FILE SEGMENT: Literature

L79 ANSWER 11 OF 37 DRUGU COPYRIGHT 2004 THOMSON DERWENT on STN

ACCESSION NUMBER: 2001-40420 DRUGU G

TITLE: Selection of excipients for melt extrusion with two poorly

water-soluble drugs by parameter calculation and thermal

analysis.

AUTHOR: Forster A; Hempenstall J; Tucker I; Rades T

CORPORATE SOURCE: Univ.Otago; GlaxoSmithKline LOCATION: Dunedin, N.Z.; Stevenage, U.K.

SOURCE: Int.J.Pharm. (226, No. 1-2, 147-61, 2001) 5 Fig. 6 Tab. 24

Ref.

CODEN: IJPHDE ISSN: 0378-5173

AVAIL. OF DOC.: Medicines Research Centre, Gunnels Wood Road, Stevenage SG1 2

NY, England. (e-mail: aqf1781@gsk.com).

LANGUAGE: English DOCUMENT TYPE: Journal

ABSTRACT:

A study was carried out to determine the miscibility of drug and excipient to predict if glass solutions are likely to form when the ***drug*** and excipient are melt extracted. Indometacin (Sigma-Chem.) and lacidipine (GlaxoSmithKline) were used as model drugs. The excipients studied included, polyvinyl alcohol (PVA; Sigma-Chem.), PEG 8000, PEG 10000, polyvinylpyrrolidone K12 (PVP, polyvidone) (all Sigma-Chem.), citric acid, glucose, lactose, mannitol, PVP K30, sucrose (all GlaxoSmithKline) and polyvinylpyrrolidone-co-vinyl-acetate (PVP/VA; ISP). The study showed that combining calculation of Hansen solubility parameters with thermal analysis of drug/excipient miscibility could be successfully applied to predict formation of glass solutions with melt extrusion.

SECTION HEADING: G Galenics

CLASSIF. CODE: 29 Pharmaceutics

70 Analysis

CONTROLLED TERM:

[01]

GLASS *FT; TRANSITION *FT; TEMPERATURE *FT; MODEL *FT;

SOLUBILITY *FT; MELTING *FT; PHARMACEUTICS *FT INDOMETACIN *OC; SIGMA-CHEM. *FT; INDOMETAC *RN;

ANTIINFLAMMATORIES *FT; ANTIPYRETICS *FT; ANTIRHEUMATICS *FT;

PROSTAGLANDIN-ANTAGONISTS *FT; OC *FT

CAS REGISTRY NO.: 53-86-1

Krishnan 09/923023 Page 31

[02] LACIDIPINE *OC; GLAXOSMITHKLINE *FT; LACIDIPIN *RN; CALCIUM-ANTAGONISTS *FT; HYPOTENSIVES *FT; OC *FT CAS REGISTRY NO.: 103890-78-4 POLYETHYLENE-GLYCOL *OC; SIGMA-CHEM. *FT; PEG *RN; MOL. *FT; [03] WEIGHT *FT; AUXILIARY-INGREDIENT *FT; PHARMACEUTICS *FT; OC [04] POLYVIDONE *OC; GLAXOSMITHKLINE *FT; POLYVIDON *RN; MOL. *FT; WEIGHT *FT; AUXILIARY-INGREDIENT *FT; PHARMACEUTICS *FT; BLOOD-SUBSTITUTES *FT; OC *FT POLYVINYLALCOHOL *OC; SIGMA-CHEM. *FT; PVA *RN; [05] AUXILIARY-INGREDIENT *FT; PHARMACEUTICS *FT; OC *FT [06] CITRATE *OC; GLAXOSMITHKLINE *FT; CITRATE *RN; AUXILIARY-INGREDIENT *FT; PHARMACEUTICS *FT; PENETRATION-ENHANCERS *FT; OC *FT CAS REGISTRY NO.: 77-92-9 LACTOSE *OC; GLAXOSMITHKLINE *FT; LACTOSE *RN; [07] AUXILIARY-INGREDIENT *FT; PHARMACEUTICS *FT; OC *FT [08] GLUCOSE *OC; GLAXOSMITHKLINE *FT; GLUCOSE *RN; AUXILIARY-INGREDIENT *FT; PHARMACEUTICS *FT; OC *FT SUCROSE *OC; GLAXOSMITHKLINE *FT; SUCROSE *RN; [09] AUXILIARY-INGREDIENT *FT; PHARMACEUTICS *FT; OC *FT POLYVIDONE-POLYVINYL-ACETATE *OC; ISP *FT; POLYVIPVA *RN; [10] AUXILIARY-INGREDIENT *FT; PHARMACEUTICS *FT; OC *FT FIELD AVAIL.: AB; LA; CT Literature FILE SEGMENT: ANSWER 12 OF 37 DRUGU COPYRIGHT 2004 THOMSON DERWENT on STN ACCESSION NUMBER: 1996-48041 DRUGU

TITLE: Freeze-drying of itraconazole-loaded nanosphere suspensions:

a feasibility study.

Chasteigner S de; Cave G; Fessi H; Devissaguet J P; Puisieux AUTHOR:

CORPORATE SOURCE: URA-CNRS; Univ. Paris; Univ. Picardie LOCATION: Chatenay Malabry, Amiens; Lyons, Fr.

Drug Dev.Res. (38, No. 2, 116-24, 1996) 6 Fig. 2 Tab. 41 Ref. SOURCE:

ISSN: 0272-4391 CODEN: DDREDK

URA CNRS 1218, Faculte de Pharmacie, Universite de Paris XI, AVAIL. OF DOC.:

5, avenue Jean-Baptiste Clement, 92 290 Chatenay-Malabry,

France. (J.P.D.).

English LANGUAGE: DOCUMENT TYPE: Journal

ABSTRACT:

Glucose, dextran and mannitol (all Prolabo), sucrose and trehalose (both Sigma-Chem.) were evaluated in the freeze-drying of itraconazole-loaded poly-epsilon-caprolactone (PeC, Aldrich) nanosphere suspensions, in a preclinical study. Addition of the carbohydrates partially protected the colloidal suspension, with, at best, 30% itraconazole (Janssen) being released in the presence of 10% glucose or sucrose. desorption was the principal destabilizing factor during freeze-drying. Use of the anionic surfactant sodium deoxycholate (DOCNa, Sigma-Chem.) in the presence of 10% sucrose completely stabilized the itraconazole-loaded nanospheres after freeze-drying, with no drug desorption. Itraconazole may find use as an antifungal in immunocompromised patients.

SECTION HEADING: G Galenics

29 Pharmaceutics CLASSIF. CODE:

55 Fungicides

CONTROLLED TERM:

Krishnan 09/923023 Page 32

IN-VITRO *FT; FORMULATION *FT; NANOSPHERE *FT; LYOPHILIZATION

*FT; SUSPENSION *FT; PHARMACEUTICS *FT

[01] GLUCOSE *OC; PROLABO *FT; GLUCOSE *RN;

CRYOPROTECTANT *FT; OC *FT

DEXTRAN *OC; PROLABO *FT; DEXTRAN *RN; CRYOPROTECTANT *FT; OC [02]

[03] MANNITOL *OC; PROLABO *FT; MANNITOL *RN;

DIURETICS *FT; LAXATIVES *FT; OC *FT

CAS REGISTRY NO.: 69-65-8

SUCROSE *OC; SIGMA-CHEM. *FT; SUCROSE *RN; OC *FT [04]

[05] TREHALOSE *OC; SIGMA-CHEM. *FT; TREHALOSE *RN; CRYOPROTECTANT

[06] ITRACONAZOLE *OC; JANSSEN *FT; ITRACONAZ *RN; FUNGICIDES *FT;

OC *FT

CAS REGISTRY NO.: 84625-61-6

[07] POLYCAPROLACTONE *OC; ALDRICH *FT; POLYCAPRO *RN; OC *FT

[80] DEOXYCHOLATE *OC; SODIUM *OC; DEOXYCHOL *RN; SODIUM-SALT *FT;

CRYOPROTECTANT *FT; CHOLAGOGUES *FT; ANTIINFLAMMATORIES *FT;

PENETRATION-ENHANCERS *FT; OC *FT

CAS REGISTRY NO.: 83-44-3 FIELD AVAIL.: AB; LA; CT FILE SEGMENT: Literature

L79 ANSWER 13 OF 37 DRUGU COPYRIGHT 2004 THOMSON DERWENT on STN

ACCESSION NUMBER: 1986-37737 DRUGU G A

TITLE:

Determination of the Antileukemia Agents Cytarabine and Azacitidine and their Respective Degradation Products by

High-Performance Liquid Chromatography.

AUTHOR: Kissinger L D; Stemm N L

CORPORATE SOURCE: Upjohn

LOCATION:

Kalamazoo, Michigan, United States

SOURCE: J.Chromatogr. (353, 309-18, 1986) 7 Fig. 2 Tab. 10 Ref.

ISSN: 0378-4347 CODEN: JOCRAM

AVAIL. OF DOC.: Control Research and Development, The Upjohn Company,

Kalamazoo, MI 49001 U.S.A.

LANGUAGE:

English Journal

ABSTRACT:

DOCUMENT TYPE:

A reversed-phase HPLC method with UV detection was developed for the assay of cytarabine (Ara-C, Upjohn) and azacytidine (5-AC, Upjohn) as well as their major degradation products in bulk drugs and pharmaceutical formulations (Ara-C as Cytosar-U sterile powder and S-AC in combination with ***mannitol*** (M) as Mylosar sterile powder). Samples of 5-AC in purified water USP, bacteriostatic water for injection (BWFI, Upjohn), lactated Ringer's injection USP (LRI, Travenol), 5% dextrose injection USP (Abbott) and 0.9% NaCl injection USP (Travenol, Abbott) as large volume parenteral (LVP) solutions in ***glass*** bottles and plastic bags were analyzed to determine the 3 first-order rate constants associated with its decomposition.

SECTION HEADING: G Galenics

A Analysis

CLASSIF. CODE:

Analysis 25 Neoplasia 29 Pharmaceutics

CONTROLLED TERM:

IN-VITRO *FT; QUANT. *FT; DET. *FT; ANALYSIS *FT; HPLC *FT; POWDER *FT; IMPURITY *FT; DECOMPOSITION *FT; CHROMATOGRAPHY

*FT; PHARM.PREP. *FT

[01] CYTARABINE *OC; SYTOSAR-U *OC; UPJOHN *FT; CYTOSTATICS *FT; Krishnan 09/923023 Page 33

VIRUCIDES *FT; CYTARABIN *RN; OC *FT

[02] AZACYTIDINE *OC; MYLOSAR *OC; UPJOHN *FT; MANNITOL *RC;

COMB.PREP. *FT; STABILITY *FT; INJECTABLE *FT; INFUSION *FT; TRAVENOL *FT; ABBOTT *FT; KINETICS *FT; TEMPERATURE *FT;

PH-PK *FT; PHARM.PREP. *FT; ANTIBIOTICS *FT; CYTOSTATICS *FT;

AZACYTIDI *RN; OC *FT

[03] SUGAR *FT; IMIDATE *FT; UREA *FT; GUANIDINE *FT; C-AMIDE *FT;

OC *FT

[04] ARABINOSYLURACIL *OC; VIRUCIDES *FT; ARAURACIL *RN; OC *FT

FIELD AVAIL.: AB; LA; CT; MPC

FILE SEGMENT: Literature

L79 ANSWER 14 OF 37 DRUGU COPYRIGHT 2004 THOMSON DERWENT on STN

ACCESSION NUMBER: 1984-14462 DRUGU A

TITLE: Simultaneous Determination of Narcotics, Adulterants and

Diluents in Street Samples by Means of Gas Chromatography

with Capillary Columns.

AUTHOR: Comparini I B; Centini F; Pariali A

CORPORATE SOURCE: Farmitalia-Erba

LOCATION: Siena, Milan, Italy

SOURCE: J.Chromatogr. (279, 609-13, 1983) 3 Fig. 2 Tab. 9 Ref.

CODEN: JOCRAM ISSN: 0378-4347

AVAIL. OF DOC.: Institute of Forensic Medicine, Second Chair, Policlinico Le

Scotte, University of Siena, 53100 Siena, Italy.

LANGUAGE: English DOCUMENT TYPE: Journal

ABSTRACT:

A capillary column GLC procedure combined with flame-ionization detection was developed for the simultaneous determination of ephedrine, phenmetrazine, caffeine, diphenhydramine, lidocaine, procaine, methaqualone, cocaine, codeine, acetylcodeine, morphine, thebaine, monoacetylmorphine, heroin, quinine, papaverine, strychnine and narcotine and several dilutants. The procedure was used in the analysis of street heroin. (congress).

SECTION HEADING: A Analysis

CLASSIF. CODE: 4 Analgesics

5 Analysis

CONTROLLED TERM:

QUANT. *FT; DET. *FT; ANALYSIS *FT; GLC *FT; CHROMATOGRAPHY

*FT

[01] EPHEDRINE *OC; SYMPATHOMIMETICS *FT; EPHEDRINE *RN; OC/FT *02* PHENMETRAZINE *OC; ANORECTICS *FT; PHENMETRA *RN; OC/FT

03 CAFFEINE *OC; PSYCHOSTIMULANTS *FT; PSYCHOTONICS *FT;

ANALEPTICS *FT; DIURETICS *FT; CAFFEINE *RN; OC *FT

[04] DIPHENHYDRAMINE *OC; ANTIHISTAMINES-H1 *FT; SEDATIVES *FT;

DIPHENHYD *RN; OC *FT

[05] LIDOCAINE *OC; ANTIARRHYTHMICS *FT; LOCAL-ANESTHETICS *FT;

LIDOCAINE *RN; OC *FT

[06] PROCAINE *OC; LOCAL-ANESTHETICS *FT; ANALGESICS *FT; PROCAINE

*RN; OC *FT

[07] METHAQUALONE *OC; SEDATIVES *FT; METHAQUAL *RN; OC/FT *08*

COCAINE *OC; LOCAL-ANESTHETICS *FT; COCAINE *RN; OC/FT *09* CODEINE *OC; ANTITUSSIVES *FT; ANALGESICS *FT; NARCOTICS *FT;

CODEINE *RN; OC *FT

[10] ACETYLCODEINE *OC; ACCODEINE *RN; OC/FT *11* MORPHINE *OC;

ANALGESICS *FT; NARCOTICS *FT; SEDATIVES *FT; MORPHINE *RN;

OC *FT

[12] THEBAINE *OC; ANALGESICS *FT; NARCOTICS *FT; THEBAINE *RN;

OC/FT *13* ACETYLMORPHINE *OC; ANALGESICS *FT; NARCOTICS *FT;

ACMORPHIN *RN; OC *FT [14] DIACETYLMORPHINE *OC; ANALGESICS *FT; NARCOTICS *FT; DIACETYLM *RN; OC *FT QUININE *OC; PROTOZOACIDES *FT; ANTIPYRETICS *FT; [15] ANTIARRHYTHMICS *FT; QUININE *RN; OC *FT PAPAVERINE *OC; CALCIUM-ANTAGONISTS *FT; VASODILATORS *FT; [16] SPASMOLYTICS *FT; PAPAVERIN *RN; OC *FT STRYCHNINE *OC; CONVULSANTS *FT; TONICS *FT; [17] ANTICHOLINESTERASES *FT; ANALEPTICS *FT; STRYCHNIN *RN; OC [18] NOSCAPINE *OC; ANTITUSSIVES *FT; NARCOTICS *FT; NOSCAPINE *RN; OC *FT FIELD AVAIL.: AB; LA; CT; MPC FILE SEGMENT: Literature L79 ANSWER 15 OF 37 PASCAL COPYRIGHT 2004 INIST-CNRS. ALL RIGHTS RESERVED. on STN DUPLICATE 4 ACCESSION NUMBER: 1997-0127740 PASCAL COPYRIGHT NOTICE: Copyright .COPYRGT. 1997 INIST-CNRS. All rights reserved. TITLE (IN ENGLISH): Optimizing the lyophilization cycle and the consequences of collapse on the pharmaceutical acceptability of Erwinia L-asparaginase AUTHOR: ADAMS G. D. J.; RAMSAY J. R. CORPORATE SOURCE: Centre for Applied Microbiology and Research, Porton Down, Salisbury, Wiltshire, SP4 OJG, United Kingdom SOURCE: Journal of pharmaceutical sciences, (1996), 85(12), 1301-1305, 7 refs. Conference: Conference on formulations and drug delivery, Boston, Massachusetts (United States), 10 Oct 1995 ISSN: 0022-3549 CODEN: JPMSAE DOCUMENT TYPE: Journal; Conference BIBLIOGRAPHIC LEVEL: Analytic COUNTRY: United States LANGUAGE: English AVAILABILITY: INIST-3209A, 354000061105150080 ABSTRACT: The antileukemia enzyme, Erwinia L-asparaginase, occurs as a tetramer which can be dissociated by the stresses of lyophilization into four subunits (subunit M.sub.r 34 000 Da). Dissociation can be reduced by adding protectants to the formulation to stabilize the biopolymer, while the product should dry to form a pharmaceutically elegant, shelf-stable cake which is readily soluble. Using analytical ultracentrifugation, HPLC, and circular dichroism we have related structural dissociation of the enzyme during lyophilization to biological activity. Additives such as mannitol prevent ablation loss of vial contents and dry to form cosmetically elegant cakes but provide little biological protection, since during freezing they crystallize and are removed from the preparation. Excipients persisting throughout the cycle in the amorphous state provide improved biological protection, although high molecular weight compounds such as Dextran (M.sub.r 70 000 Da) are most effective only during product

containing monosaccharides often exhibit low collapse temperatures (T.sub.c) measured using a freeze-drying microscope or glass transition

Searched by Barb O'Bryen, STIC 308-4291

freezing or storage. Low molecular weight sugars are protective throughout the cycle although formulations

Krishnan 09/923023 Page 35

analysis, but these formulations distort as drying progresses to form a collapsed, cosmetically unacceptable cake, with reduced activity, poor stability, a high moisture content, and reduced solubility. Collapse can be avoided by formulating with disaccharides, which display higher T.sub.c temperatures than monosaccharides, or drying below T.sub.c. Dried samples which persist in the amorphous state can also collapse when stored above their solid-state collapse temperatures when they decay at a faster rate than predicted by Arrhenius kinetics. The solid-state collapse temperature can be significantly decreased by the diffusion of moisture from the stopper into the dry product resulting in an increase in sample water content. Lyophilization cycle times can be reduced by analyzing collapse characteristics so that the relationship between product temperature and chamber pressure can be controlled so that drying rates can be optimized while ensuring that the product does, not melt or collapse during sublimation.

CLASSIFICATION CODE:

002B02A03; Life sciences; Medical sciences;

Pharmacology

CONTROLLED TERM:

BROADER TERM:

Asparaginase; Formulation; Antineoplastic agent;

Freeze drying; Pharmaceutical technology; Preparation

Hydrolases; Enzyme

on STN

ANSWER 16 OF 37 PASCAL COPYRIGHT 2004 INIST-CNRS. ALL RIGHTS RESERVED.

ACCESSION NUMBER:

COPYRIGHT NOTICE:

2001-0081259 PASCAL

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reserved.

TITLE (IN ENGLISH):

Mechanisms of protection of cationic lipid-DNA

complexes during lyophilization

ALLISON S. Dean; ANCHORDOQUY Thomas J.

AUTHOR: CORPORATE SOURCE:

Center for Pharmaceutical Biotechnology, School of

Pharmacy, C238, University of Colorado Health Sciences

Center, Denver, Colorado 80262, United States

Journal of pharmaceutical sciences, (2000), 89(5),

682-691, 29 refs.

Conference: 1999 Macromolecular Drug Delivery

Conference, Breckenridge, Colorado (United States), 14

Jul 1999

ISSN: 0022-3549 CODEN: JPMSAE

Journal; Conference

Analytic

United States

English

INIST-3209A, 354000093599450140

Gene therapy using nonviral vectors offers advantages over viral methods. However, the instability of aqueous suspensions of cationic lipid-DNA complexes is a major problem that must be overcome to develop this

therapeutic modality on a pharmaceutical scale.

Disaccharides have been reported to protect lipid-DNA

complexes during lyophilization, and recovery of transfection correlates with the retention of particle size. However, the mechanism by which disaccharides achieve this protection is not known. The purpose of this study was to investigate the protective mechanism

by lyophilizing cationic lipid-DNA complexes with a variety of solutes that have different physical behaviors during the lyophilization process. In

SOURCE:

COUNTRY:

LANGUAGE:

DOCUMENT TYPE:

AVAILABILITY: ABSTRACT:

BIBLIOGRAPHIC LEVEL:

. '...

agreement with previous studies, disaccharides conferred protection to lipid-DNA complexes. By contrast, a large polymeric sugar, hydroxyethyl starch, did not protect as well. The level of protection by additives, such as mannitol, that crystallized during lyophilization was also less than that of the disaccharides, but some protection was nonetheless observed. These data suggest that water replacement plays a significant role in protecting complexes during lyophilization. A second mechanism that prevents aggregation by diluting complexes within freeze-concentrated solutions or dried cakes may also contribute to protection. Sample vitrification did not correlate with maintenance of transfection efficiency. Elucidation of the mechanism(s) by which cationic lipid-DNA complexes are protected during

lyophilization will permit a rational approach to the

development of stable, lyophilized formulations.

CLASSIFICATION CODE: 002B02A03; Life sciences; Medical sciences;

Pharmacology

CONTROLLED TERM: Pharmaceutical technology; Transfection; In vitro; Dosage form; Animal; Monkey; Drug

carrier; Physical properties; Chemical properties;

Lipids; Cationic site; DNA; Freeze drying;

Cryoprotective agent; Particle size;

Vehicle(excipient); Ethylene oxide polymer; Mannitol; Sucrose; Trehalose; Lactose; Glucose; Chemical stability; Chemical

structure; Physical structure; Glass transition temperature; Structure stability

BROADER TERM: Primates; Mammalia; Vertebrata; Genetics; Gene therapy

L79 ANSWER 17 OF 37 JICST-EPlus COPYRIGHT 2004 JST on STN

ACCESSION NUMBER:

1020865071 JICST-EPlus TITLE:

Characteristics of change in molecular weight of DE-310

which is a polymeric drug with storage time.

AUTHOR: TAKEUCHI MASAHITO; ASAI MASAHIDE; TOMITSUKA TOSHIAKI

SAKAI HIDEKI; ABE MASAHIKO

Daiichiseiyaku Tokyoseizaigise CORPORATE SOURCE:

Sci. Univ. Tokyo, Graduate School of Sci. and Technol., JPN SOURCE: Zairyo Gijutsu (Material Technology), (2002) vol. 20, no.

5, pp. 242-247. Journal Code: Y0644A (Fig. 6, Tbl. 4, Ref.

14)

CODEN: MTECFQ; ISSN: 0289-7709

PUB. COUNTRY: Japan

DOCUMENT TYPE:

Journal; Article

LANGUAGE: Japanese

STATUS:

ABSTRACT:

Carboxymethyldextran polyalcohol camptothecin conjugate, which is a novel polymeric drug, was synthesized, and is being developed as a code of DE-310. We studied on the effects of storage temperature, excipients, and water content on the change in weight-average molecular weight, Mw, of lyophilized samples containing DE-310. Mw of DE-310 in lyophilized samples with excipients increased with storage time, and relationship between the rate of the increment in Mw and storage temperature was able to be expressed as Arrehenius plot. In addition, the sample having high glass transition temperature, Tg, showed low degree of the increment in Mw. The lyophilized samples with disaccharides were higher Tg than one of samples with ***monosaccharides*** or sugar alcohols. The lyophilized sample with maltose showed the highest Tg in the samples studied, and it was found that maltose especially suppressed increasing in Mw with storage time. (author abst.)

CLASSIFICATION:

GW16010A (615.277.3)

CONTROLLED TERM:

drug; polymeric agent; molecular weight; glass transition point; freeze drying; antitumor drug; dextran; spacer; amidation; time course; temperature; disaccharide; water content; Arrhenius equation; conservation; glucoside;

pyranoside; reducing sugar

BROADER TERM:

functional polymer; macromolecule; mass (mechanical quantity); mechanical quantity; transition temperature; thermodynamic property; drying; glucan; glycoside; polysaccharide; carbohydrate; object; chemical reaction; variation; oligosaccharide; content; characteristic;

formula

SUPPLEMENTARY TERM: conservation(property)

L79 ANSWER 18 OF 37 BIOTECHNO COPYRIGHT 2004 Elsevier Science B.V. on STN

DUPLICATE

ACCESSION NUMBER:

TITLE:

AUTHOR:

CORPORATE SOURCE:

SOURCE:

DOCUMENT TYPE: COUNTRY:

LANGUAGE:

SUMMARY LANGUAGE:

ABSTRACT:

2000:30487621 BIOTECHNO

Effect of DNA complexation and freeze-drying on the physicochemical characteristics of cationic liposomes

Cortesi R.; Esposito E.; Nastruzzi C.

Prof. C. Nastruzzi, Inst. Chimica Technologia Farmaco,

via del Liceo, 06100 Perugia, Italy.

Antisense and Nucleic Acid Drug Development, (2000),

10/3 (205-215), 15 reference(s) CODEN: ANADF5 ISSN: 1087-2906

United States English English

Journal; Article

We describe the use of saccharides, such as sorbitol, mannitol, sucrose, maltodextrin,

and dextran, as cyoprotectants. for freeze-drying

cationic liposomes. Saccharides can protect

liposomes either by interacting with phospholipid

headgroups or by forming an amorphous glass

surrounding the vesicles, thus preventing aggregation, mechanical rupture of membrane, fusion of liposomes,

and drug leakage. We have particularly

considered liposome characteristics, such as size, zeta potential, and ability in complexing DNA, before and after freeze-drying. Our study indicates that cationic liposomes are able to maintain liposome characteristics after lyophilization and rehydration and maintain the ability to complex DNA even if the strength of the interaction forces was of lower

intensity with respect to liposomes before

lyophilization.

CONTROLLED TERM:

*liposome; *DNA binding; *freeze drying; carbohydrate; cation; cryoprotective agent; dextran; drug carrier; maltodextrin; mannitol; phospholipid; sorbitol; sucrose; cryoprotection; drug transport; membrane fusion; membrane rupture; physical chemistry; zeta potential; article; priority journal

CAS REGISTRY NUMBER:

(dextran) 87915-38-6, 9014-78-2; (maltodextrin) 9050-36-6; (mannitol) 69-65-8, 87-78-5; (sorbitol)

26566-34-7, 50-70-4, 53469-19-5; (sucrose)

122880-25-5, 57-50-1

ACCESSION NUMBER:

TITLE: AUTHOR:

ANSWER 19 OF 37 BIOTECHNO COPYRIGHT 2004 Elsevier Science B.V. on STN

2001:32737976 BIOTECHNO

Corynebacterium diphtheriae threats in cancer patients Mattos-Guaraldi A.L.; Formiga L.C.D.; Camello T.C.F.; Pereira G.A.; Hirata R. Jr.; Dias L.M.D.; Halpern M.

CORPORATE SOURCE:

A.L. Mattos-Guaraldi, Faculdade de Ciencias Medicas, Univ.do Estado do Rio de Janeiro, Av. 28 Setembro 87-Fundos, 3 andar, CEP 20.551-030 Rio Janeiro, Brazil.

E-mail: guaraldi@uerj.br

Revista Argentina de Microbiologia, (2001), 33/2

(96-100), 24 reference(s)

CODEN: RAMID4 ISSN: 0325-7541

Journal; Article

Argentina

English

SUMMARY LANGUAGE:

ABSTRACT:

COUNTRY:

LANGUAGE:

DOCUMENT TYPE:

SOURCE:

English; Spanish

The aim of this study was to determine the bacteriological properties of Corynebacterium

diphtheriae strains isolated from bronchiole washing and cancer lesions. Bacteriological characterization included fluorescence/double sugar urease (King/DSU) screening tests, pyrazinamidase (PYZ), CAMP- reactions

and radial immunodiffusion toxigenicity assay.

Microorganisms produced fluorescence under ultraviolet light and were catalase positive: urea and aesculin hydrolysis negative; fermentation of glucose, maltose and sucrose and no fermentation of mannitol and

xylose; PYZ and CAMP reaction negative. The API-Coryne

system was used for bacterial preliminary

identification at local hospital laboratory and produced numerical profiles 1010325 and 0010325 for sucrose positive C. diphtheriae var. mitis (nitrate positive) and C. diphtheriae var. belfanti (nitrate negative), respectively. The hemagglutination, adherence to glass and polystyrene assays evaluated

adhesive characteristics. Strains were toxigenic and able to adhere to glass, polystyrene and human

erythrocyte surfaces (titer 4). C. diphtheriae strains isolated from cancer patients expressed adhesive characteristics similar to strains isolated from immunocompetent hosts. Circulation of toxigenic C. diphtheriae continues to present a threat for children and adults including patients with cancer in hospital

environment. Laboratories should remain alert to the possibility of isolation of diphtheria bacilli from

adults with neoplastic disease.

CONTROLLED TERM:

*Corynebacterium diphtheriae; *cancer patient; *bacterium adherence; *bacterial infection;

tracheobronchial toilet; immunodiffusion; toxicity; ultraviolet radiation; fermentation; hemagglutination;

erythrocyte; hospital laboratory; bacterium

identification; blastoma; basal cell carcinoma; human; nonhuman; male; female; controlled study; aged; adult; article; urease; pyrazinamidase; amidase; cyclic AMP;

catalase; urea; esculin; glucose; maltose;

sucrose; mannitol; xylose;

glass; polystyrene; nitrate; unclassified

drug

CAS REGISTRY NUMBER:

(urease) 9002-13-5; (pyrazinamidase) 39419-71-1; (amidase) 9012-56-0; (cyclic AMP) 60-92-4; (catalase) 9001-05-2; (urea) 57-13-6; (esculin) 531-75-9; (glucose) 50-99-7, 84778-64-3; (maltose) 16984-36-4, 69-79-4; (sucrose) 122880-25-5, 57-50-1; (mannitol) 69-65-8, 87-78-5; (xylose) 25990-60-7, 58-86-6; (polystyrene) 9003-53-6; (nitrate) 14797-55-8

L79 ANSWER 20 OF 37 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN ACCESSION NUMBER: 2003-22896 BIOTECHDS

TITLE:

New DNA pharmaceutical agent dosage form, having a dense core element coated with a solid reservoir medium, useful for preventing and/or treating disorders, such as an infectious disease, cancer, allergy or autoimmune disease;

plasmid, DNA or protein transfer and expression in host

cell for nucleic acid vaccine and gene therapy

CATCHPOLE I R AUTHOR: PATENT ASSIGNEE: GLAXO GROUP LTD

WO 2003061629 31 Jul 2003 PATENT INFO: APPLICATION INFO: WO 2003-GB336 23 Jan 2003

PRIORITY INFO: GB 2002-1736 25 Jan 2002; GB 2002-1735 25 Jan 2002

DOCUMENT TYPE: Patent LANGUAGE:

English

OTHER SOURCE: ABSTRACT:

WPI: 2003-636713 [60] DERWENT ABSTRACT:

NOVELTY - A DNA pharmaceutical agent dosage form having a dense core element coated with a solid reservoir medium containing the DNA pharmaceutical agent, is

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for a process for the preparation of a DNA pharmaceutical agent dosage form, comprising making a solution of DNA pharmaceutical agent, reservoir medium, and stabilizing agent that inhibits the degradative effects of free radicals in a solvent, followed by coating the at least one dense core element with the solution, and removing the solvent to form a solid reservoir medium containing the pharmaceutical agent and agent that inhibits the degradative effects of free radicals.

WIDER DISCLOSURE - Nucleic acids, polypeptides, vectors, host cells and antibodies used in the methods, are also disclosed.

BIOTECHNOLOGY - Preferred DNA Pharmaceutical Agent: The DNA pharmaceutical agent dosage form further comprises a stabilizing agent that inhibits the degradative effects of free radicals, where the stabilizing agent is one or both of a metal ion chelator and a free radical scavenger. The metal ion chelating agent is inositol hexaphosphate, tripolyphosphate, succinic and malic acid, ethylenediamine tetraacetic acid (EDTA), tris (hydroxymethyl) amino methane (TRIS), Desferal, diethylenetriaminepentaacetic acid (DPTA) and ethylenediaminidihydrozyphenylacetic acid (EDDHA). The non-reducing free radical scavenger is ethanol, methionine or gluthathione. The stabilizing agent that inhibits the degradative effects of free radicals is phosphate buffered ethanol solution in combination with methionine or EDTA, or Tris buffered EDTA in combination with methionine or ethanol. The solid reservoir medium is an amorphous polyol, preferably stabilizing polyol. The solid biodegradable reservoir medium is a sugar, preferably lactose, glucose, sucrose, raffinose or trehalose. The solid reservoir medium is in the form of a glass, preferably sugar glass. The DNA is supercoiled plasmid DNA that is stabilized such that after storage at 37 degreesC for 4 weeks greater than 50% of the DNA remains in its supercoiled form. The DNA is stabilized such that when released the ratio of monomer:dimer supercoiled form is within the range of 0.8:1.2. The pharmaceutical agent is a vaccine. The solid reservoir medium further comprises a vaccine adjuvant, transfection facilitating agent, DNase inhibitor or a crystal poisoner. The adjuvant is CpG, a synthetic imidazoquinolines, tucerasol, cytokines, MPL, QS21, QS7 or oil in water

emulsions. The dense core elements are microbeads of a mean particle diameter of 0.5-10 micrometers, and is a gold or tungsten microbead. Preferred Process: The reservoir medium in the process for preparing a DNA pharmaceutical agent dosage is a sugar. The concentration of sugar prior to drying onto the support member is 20-40% w/v. The solvent is demetalated prior to the process.

ACTIVITY - Cytostatic; Antiallergic; Immunosuppressive; Antibacterial. No biological data given.

MECHANISM OF ACTION - Vaccine.

USE - The methods and compositions are useful for preventing and/or treating disorders, such as an infectious disease, cancer, allergy or autoimmune diseases.

EXAMPLE - No relevant example given. (46 pages) THERAPEUTICS, Gene Therapy; GENETIC TECHNIQUES and

APPLICATIONS, Gene Expression Techniques and Analysis; DISEASE, Cancer; DISEASE, Autoimmune Disease; DISEASE, Other Diseases; PHARMACEUTICALS, Vaccines; THERAPEUTICS, Protein

Therapeutics

CONTROLLED TERMS: PLASMID, DNA, PROTEIN TRANSFER, EXPRESSION IN HOST CELL,

SOLID RESERVOIR MEDIUM, GOLD, TUNGSTEN MICROBEAD, APPL. NUCLEIC ACID VACCINE, INFECTIOUS DISEASE, CANCER, ALLERGY, AUTOIMMUNE DISEASE THERAPY, PREVENTION, GENE THERAPY TUMOR

(22, 39)

L79 ANSWER 21 OF 37 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN ACCESSION NUMBER: 1995-05927 BIOTECHDS

TITLE: The use of non-woven fabrics matrices in

xylitol production from D-xylose by immobilized Candida tropicalis;

addition of D-glucose as NADPH source for enhanced xylitol productivity; use as a

sweetener

AUTHOR: Yahashi Y; Ogawa M; Suzuki T; Kawai K; Takamizawa K; Horitsu

CORPORATE SOURCE: Univ.Gifu; Univ.Chukyo-Women's

LOCATION: Department of Biotechnology, Faculty of Agriculture, Gifu

University, 1-1, Yanagido, 501-11 Japan.

Biotechnol.94 Appl.Biocatal.; (1994) 59-61

CODEN: 9999N

Biotechnology '94, Applied Biocatalysis, Brighton, UK, 4-6

July, 1994. Journal

DOCUMENT TYPE:

SOURCE:

CLASSIFICATION:

English

LANGUAGE:

ABSTRACT: The application of non-woven fabrics as supports for immobilization of Candida tropicalis IFO 0618 for use in

xylitol production was examined. Yeast cells were inoculated into a 250 ml glass column reactor (50

mm by 150 mm), containing 200 ml of production medium (17.2%

D-xylose, 2.1% yeast extract, 1.5% KH2PO4, 0.3%

(NH4)2PO4, and 0.1% MgSO4.7H2O, pH 4) to achieve about 10 g/1initial dry cell amount and incubated at 30 deg in a water bath. Aeration was at 700 ml/min providing 90% 02 gas

constantly. The utilization of non-woven fabrics was superior for cell immobilization without leakage of cells than other immobilization methods tested (calcium alginate and polyacrylamide), though the production rate and yield of

xylitol were not sufficient. In order to enhance xylitol productivity using non-woven fabrics, Dglucose was fed in the medium as a NADPH source.

Maximum production rate (2.71 g/l/hr) and maximum yield

(96.8%) were obtained by 12 g/day of D-glucose feeding. Xylitol is an anticariogenic sweetener Krishnan 09/923023 Page 41

that does not need insulin for its digestion in diabetics.

F FOOD; F1 Food and Food Additives; K BIOCATALYSIS; K2 CLASSIFICATION:

Application

CONTROLLED TERMS: XYLITOL PREP, D-XYLOSE, NON-WOVEN FABRIC

SUPPORT FOR CANDIDA TROPICALIS IMMOBILIZATION, D-GLUCOSE ADDITION, APPL. SWEETENER SUGAR FUNGUS YEAST

(VOL.14, NO.10)

L79 ANSWER 22 OF 37 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN

ACCESSION NUMBER: 1992-04060 BIOTECHDS

TITLE:

Contributions to the biotechnological production of

sweeteners from Stevia rebaudiana Bertoni. I. A method for

the serial analysis of diterpene glycosides by HPLC;

cold methanol extraction of stevioside sweetener from S.

rebaudiana cell culture and analysis by modified

HPL-chromatography

AUTHOR: LOCATION:

SOURCE:

Striedner J; Czygan F C; *Braunegg G

Technische Universitaet Graz, Institut fuer Biotechnologie,

A-8010 Graz, Petersgasse 12, Austria.

Acta Biotechnol.; (1991) 11, 5, 495-99

CODEN: ACBTDD

DOCUMENT TYPE:

Journal

LANGUAGE:

English

ABSTRACT: A cold extraction procedure was developed for the extraction

of stevioside, a non-caloric sweetener, from cell cultures of

Stevia rebaudiana. A glass column (inner diameter

10 mm) of variable length was filled with a sample (50-1,000 mg) of S. rebaudiana, and connected to a solvent distributor hooked up to a solvent reservoir. Depending on their wt., samples were extracted exhaustively using 100-500 ml cold methanol for 7-8 hr. Since S. rebaudiana cell cultures often produce substances which interfere with stevioside detection, and since very low stevioside concentrations occur in plant cell cultures, the concentrated raw extracts were placed on thin layer aluminum foils (silica gel 60, 20 x 20 cm) and developed in n-butanol-ethyl acetate-2-propanol-water (35:100:60:30). Compounds in the Rf range 0.30-0.55

(diterpene glycosides) were removed and eluted from the silica gel with methanol. The filtered samples were

subjected to a modified HPLC procedure using

acetonitrile-water (86:14). Using a flow rate of 1 ml/min, the total time per run of 30-60 min was shorter than the time

needed for sample preparation. (13 ref)

CLASSIFICATION:

J CELL CULTURE; J2 Plant Cell Culture; F FOOD ADDITIVES AND SCP; F1 Food Additives and SCP; C CHEMISTRY; C1 Analysis and

Structure

CONTROLLED TERMS: STEVIOSIDE SWEETENER ISOL. FROM STEVIA REBAUDIANA BY COLD

METHANOL EXTRACTION, ANALYSIS BY MODIFIED HPLC

DITERPENE GLYCOSIDE PLANT CYCLOALKANE RING-5 RING-6

COND.RING BRIDGE-STRUCT. OLEFIN C-ESTER GLYCOSIDE STEROID

TERPENE CHROMATOGRAPHY

L79 ANSWER 23 OF 37 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN

ACCESSION NUMBER: DOCUMENT NUMBER:

2003:553158 BIOSIS

TITLE:

PREV200300556431

AUTHOR(S):

Scientific and technological aspects of aqueous glasses.

Franks, Felix [Reprint Author]

CORPORATE SOURCE:

BioUpdate Foundation, 229 Ballards Lane, 25 The Fountains,

London, N3 1NL, UK

bioup@dial.pipex.com

SOURCE:

Biophysical Chemistry, (September 2003) Vol. 105, No. 2-3,

pp. 251-261. print.

CODEN: BICIAZ. ISSN: 0301-4622.

DOCUMENT TYPE:

Article

General Review; (Literature Review)

LANGUAGE:

English

ENTRY DATE:

Entered STN: 26 Nov 2003

Last Updated on STN: 26 Nov 2003

ABSTRACT: The physical nature of a glass, as related to stable liquid and crystalline solid phases was defined by Kauzmann in 1948. Since then, ***glass*** research has been almost exclusively confined to inorganic materials. This review aims to demonstrate that many substances, not falling into the category of classical 'materials', can be rendered into amorphous states. In particular, water itself, but also water soluble and water sensitive organic molecules, some of them biomolecules, can be rendered into supersaturated and solid solutions. New ways of studying and applying amorphisation processes have led to major advances in food and pharmaceutical processing aimed mainly at the stabilisation of labile materials. Because of their molecular similarities to water, polyhydroxy compounds are attracting particular interest as potential matrix elements in the preparation of glassy products.

CONCEPT CODE:

Genetics - General 03502

Biochemistry studies - General 10060

Biochemistry studies - Nucleic acids, purines and

pyrimidines 10062

Biochemistry studies - Proteins, peptides and amino acids

10064

Biochemistry studies - Carbohydrates 10068

Pathology - Therapy 12512

Food technology - General and methods 13502

Endocrine - Pituitary 17014 Pharmacology - General 22002

INDEX TERMS:

Major Concepts

Foods; Molecular Genetics (Biochemistry and Molecular

Biophysics); Pharmacology Chemicals & Biochemicals

INDEX TERMS:

2-(4-nitrophenoxy) tetrahydropyran; DNA; Ficoll;

arabinose; cyclodextrin; fructose;
glucose; human growth hormone; lactose;
maltohexaose; maltotriose; mannitol;
polyhydroxy compound; raffinose; ribose;

sorbitol; stachyose; sucrose; trehalose; water;

xylose

INDEX TERMS:

Methods & Equipment

apomorphization: laboratory techniques

INDEX TERMS:

Miscellaneous Descriptors

aqueous glasses; food processing; pharmaceutical

processing

REGISTRY NUMBER:

25702-74-3 (Ficoll) 147-81-9 (arabinose)

12619-70-4 (cyclodextrin)

57-48-7Q (fructose) 30237-26-4Q (fructose) 50-99-7Q (glucose) 58367-01-4Q (glucose)

12629-01-5 (human growth hormone)

63-42-3 (lactose)

34620-77-4 (maltohexaose) 1109-28-0 (maltotriose) 69-65-8Q (mannitol) 87-78-5Q (mannitol) 512-69-6 (raffinose) 50-69-1Q (ribose) 34466-20-1Q (ribose) 93781-19-2Q (ribose) 50-70-4 (sorbitol) 470-55-3 (stachyose) 57-50-1 (sucrose) 99-20-7 (trehalose) 7732-18-5 (water) 58-86-6Q (**xylose**) 25990-60-7Q (**xylose**)

L79 ANSWER 24 OF 37 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN

ACCESSION NUMBER: DOCUMENT NUMBER:

CORPORATE SOURCE:

1997:41555 BIOSIS PREV199799333543

TITLE:

Optimizing the lyophilization cycle and the consequences of collapse on the pharmaceutical acceptability of Erwinia

L-asparaginase.

AUTHOR(S):

Adams, Gerald D. J.; Ramsay, J. Richard [Reprint author] Centre Applied Microbiol. Research, Porton Down, Salisbury,

Wiltshire SP4 OJG, UK

SOURCE:

Journal of Pharmaceutical Sciences, (1996) Vol. 85, No. 12,

pp. 1301-.

CODEN: JPMSAE. ISSN: 0022-3549.

DOCUMENT TYPE:

Article English

LANGUAGE: ENTRY DATE:

Entered STN: 28 Jan 1997

Last Updated on STN: 28 Jan 1997

ABSTRACT: The antileukemia enzyme, Erwinia L-asparaginase, occurs as a tetramer which can be dissociated by the stresses of lyophilization into four subunits (subunit M-r 34 000 Da). Dissociation can be reduced by adding protectants to the formulation to stabilize the biopolymer, while the product should dry to form a pharmaceutically elegant, shelf-stable cake which is readily soluble. Using analytical ultracentrifugation, HPLC, and circular dichroism we have related structural dissociation of the enzyme during lyophilization to biological activity. Additives such as mannitol prevent ablation loss of vial contents and dry to form cosmetically elegant cakes but provide little biological protection, since during freezing they crystallize and are removed from the preparation. Excipients persisting throughout the cycle in the amorphous state provide improved biological protection, although high molecular weight compounds such as Dextran (M-r 70 000 Da) are most effective only during product freezing or storage. Low molecular weight sugars are protective throughout the cycle although formulations containing ***monosaccharides*** often exhibit low collapse temperatures (T-c) measured using a freeze-drying microscope or glass transition temperatures (T-g') measured by thermal analysis, but these formulations distort as drying progresses to form a collapsed, cosmetically unacceptable cake, with reduced activity, poor stability, a high moisture content, and reduced solubility. Collapse can be avoided by formulating with disaccharides, which display higher T, temperatures than monosaccharides, or drying below T-c. Dried samples which persist in the amorphous state can also collapse when stored above their solid-state collapse temperatures when they decay at a faster rate than predicted by Arrhenius kinetics. The solid-state collapse temperature can be significantly decreased by the diffusion of moisture from the stopper into the dry product resulting in an increase in sample water content. Lyophilization cycle times can be reduced by analyzing collapse characteristics so that the relationship between product temperature and chamber pressure can be controlled so that drying rates can be optimized while ensuring that the product does not melt or collapse during sublimation. CONCEPT CODE:

Biochemistry methods - Proteins, peptides and amino acids

10054

Biochemistry studies - Proteins, peptides and amino acids

10064

Biophysics - Molecular properties and macromolecules

10506

Biophysics - Bioengineering 10511

Enzymes - Methods 10804 Pathology - Therapy 12512 Pharmacology - General

Pharmacology - Drug metabolism and metabolic stimulators

22003

Pharmacology - Clinical pharmacology

Pharmacology - Blood and hematopoietic agents Neoplasms - Therapeutic agents and therapy

Neoplasms - Blood and reticuloendothelial neoplasms 24010

Physiology and biochemistry of bacteria

INDEX TERMS: Major Concepts

> Biochemistry and Molecular Biophysics; Enzymology (Biochemistry and Molecular Biophysics); Methods and Techniques; Pharmacology; Physiology; Tumor Biology

INDEX TERMS: Chemicals & Biochemicals

L-ASPARAGINASE

INDEX TERMS: Miscellaneous Descriptors

> BACTERIAL L-ASPARAGINASE; DRUG DELIVERY; DRUG FORMULATION; ENZYMOLOGY; LYOPHILIZATION CYCLE; PHARMACEUTICAL ACCEPTABILITY; PHARMACOLOGY

ORGANISM: Classifier

> Enterobacteriaceae 06702

Super Taxa

Facultatively Anaerobic Gram-Negative Rods; Eubacteria;

Bacteria; Microorganisms

Organism Name Erwinia Taxa Notes

Bacteria, Eubacteria, Microorganisms

REGISTRY NUMBER: 9015-68-3 (L-ASPARAGINASE)

L79 ANSWER 25 OF 37 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN

ACCESSION NUMBER: 1985:244957 BIOSIS

DOCUMENT NUMBER:

PREV198579024953; BA79:24953

TITLE: CHANGES IN ELECTRICAL CONDUCTIVITY OF VARIOUS DRUGS IN

AQUEOUS FROZEN PHASE 1. THE MEASUREMENT OF EUTECTIC

TEMPERATURE AND COLLAPSE TEMPERATURE AT AMORPHOUS FREEZING.

AUTHOR(S): INOUE M [Reprint author]; SHIMA K; INAZU K

CORPORATE SOURCE: SHIONOGI RES LAB, SHIONOGI CO, LTD, FUKUSHIMA-KU, OSAKA

553, JPN

SOURCE: Yakugaku Zasshi, (1984) Vol. 104, No. 9, pp. 966-972.

CODEN: YKKZAJ. ISSN: 0031-6903.

DOCUMENT TYPE:

Article

FILE SEGMENT:

BA

LANGUAGE:

JAPANESE

ABSTRACT: Changes in the electrical conductivity (conductivity) of various ***drugs*** [nicotinamide, thiamine, dicethiamin, ascorbic acid, glycine, .beta.-alanine, cephalotin, cefamandol, cefazolin, cephaloridine, moxalactam, ***mannitol***

, glucose, xylose and maltose] in aqueous frozen phase were measured at increasing temperature and the logarithm of the conductivity was plotted against reciprocal of absolute temperature. change in the conductivity after the frozen solution being led to its eutectic state by either annealing or seeding was examined to obtain eutectic temperature. Investigation disclosed the relationship between collapse temperature (cp) observed during freeze-drying and the change in the conductivity observed in the process of amorphous freezing. Ascorbic acid, , etc. when subjected to amorphous freezing showed a bend, while cephalothin sodium, cephamandol sodium, etc. exhibited a sharp increase in the conductivity at individual cp. When the curve showed a bend, cp varied with the concentration of drug; this dependence of cp upon concentration was not observed in cases when a sharp increase in the conductivity could be observed. The sharp increase in the conductivity could be correlated with an endothermic peak or DSC [differential scanning calorimetry]. Generation of a sharp increase in the conductivity was interpreted to indicate glass

Krishnan 09/923023 Page 45

transition accompanied with heat absorption in amorphous-frozen state of an aqueous drug solution.

CONCEPT CODE:

Biochemistry studies - General 10060 Biochemistry studies - Vitamins 10063

Biochemistry studies - Proteins, peptides and amino acids

10064

Biochemistry studies - Carbohydrates 10068

Biophysics - General 10502

Biophysics - Methods and techniques 10504

Biophysics - Molecular properties and macromolecules

10506

External effects - Temperature as a primary variable - cold

10616

Pharmacology - General 22002

Temperature - General measurement and methods 23001 Chemotherapy - General, methods and metabolism 38502

INDEX TERMS:

Major Concepts
Biochemistry and Molecular Biophysics; Methods and

Techniques; Pharmacology

INDEX TERMS:

Miscellaneous Descriptors

NICOTINAMIDE THIAMIN DICETHIAMIN ASCORBIC-ACID GLYCINE

BETA ALANINE CEPHALOTHIN CEPHAMANDOL CEFAZOLIN

CEPHALORIDINE MOXALACTAM MANNITOL GLUCOSE XYLOSE MALTOSE

REGISTRY NUMBER:

98-92-0 (NICOTINAMIDE)

59-43-8 (THIAMIN)

50-81-7Q (ASCORBIC-ACID) 62624-30-0Q (ASCORBIC-ACID)

56-40-6 (GLYCINE)

107-95-9 (BETA-ALANINE) 153-61-7 (CEPHALOTHIN) 25953-19-9 (CEFAZOLIN) 50-59-9 (CEPHALORIDINE) 64952-97-2 (MOXALACTAM) 69-65-8Q (MANNITOL) 87-78-5Q (MANNITOL) 50-99-7Q (GLUCOSE) 58367-01-4Q (GLUCOSE) 58-86-6Q (XYLOSE) 25990-60-7Q (XYLOSE) 69-79-4 (MALTOSE) 16984-36-4Q (MALTOSE)

L79 ANSWER 26 OF 37 TOXCENTER COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

1997:157461 TOXCENTER

COPYRIGHT:

Copyright 2004 ACS CA12624321093Y

DOCUMENT NUMBER: TITLE:

Preparation of drug nanoparticles by spray drying

AUTHOR(S):

Selvaraj, Ulagaraj; Messing, Gary L.

CORPORATE SOURCE:

ASSIGNEE: Messing, Gary L.

PATENT INFORMATION: WO 9713503 A1 17 Apr 1997

(1997) PCT Int. Appl., 58 pp.

SOURCE:

CODEN: PIXXD2.

COUNTRY:

UNITED STATES

DOCUMENT TYPE: FILE SEGMENT:

Patent CAPLUS

OTHER SOURCE:

CAPLUS 1997:347295

LANGUAGE:

English

ENTRY DATE:

Entered STN: 20011116

Last Updated on STN: 20020403

ABSTRACT:

The present invention relates to a method for manufg. nanoparticles comprising combining an agent and a matrix to form a composite mixt. and spray drying the composite mixt., wherein the nanoparticles are less than about 5000

Suitable agents that can be formulated into nanoparticle include therapeutic and diagnostic agents, cosmetics, dyes, photog. agent, foods, pesticides, among others. Et 3,5-diacetamido-2,4,6-triiodobenzoate 5 g was dissolved in 100 mL DMSO and to this soln., 10 g sucrose dissolved in 10 mL water was added. The soln. was sonicated and then atomized. The atomized droplets were transported through the glass tubing at 60-250.degree. to obtain fine particulates. CLASSIFICATION CODE: 63-6 SUPPLEMENTARY TERMS: Miscellaneous Descriptors nanoparticle drug matrix spray drying REGISTRY NUMBER: 1309-48-4 (Magnesia) 12068-51-8 (Alumina magnesia) 21645-51-2 (Aluminum hydroxide) 50-70-4 (D-Glucitol) 50-78-2 (Aspirin) 50-99-7 (D-**Glucose**) 53-86-1 (Indomethacin) 54-21-7 (Sodium salicylate) 57-11-4 (Octadecanoic acid) 57-48-7 (**Fructose**) 57-50-1 (Sucrose) 60-54-8 (Tetracycline) 69-65-8 (D-Mannitol) 69-79-4 (Maltose) 79-41-4Q (derivs., polymers) 87-79-6 (L-Sorbose) 112-92-5 (1-Octadecanol) 144-74-1 (Sulfathiazole sodium salt) 149-44-0 (Sodium formaldehyde sulfoxylate) 471-34-1 (Calcium carbonate) 532-32-1 (Sodium benzoate) 1406-05-9 (Penicillin) 1592-23-0 (Calcium stearate) 2168-75-4 (Ethyl 3,5-diacetamido-2,4,6-triiodobenzoate) 3458-28-4 (Mannose) 7447-40-7 (Potassium chloride) 7631-90-5 (Sodium bisulfite) 7647-14-5 (Sodium chloride (NaCl)) 7681-57-4 (Sodium metabisulfite) 7727-43-7 (Barium sulfate) 7772-98-7 (Sodium thiosulfate) 9000-01-5 (Gum arabic) 9000-28-6 (Gum ghatti) 9000-30-0 (Guar gum) 9000-36-6 (Karaya gum) 9000-40-2 (Locust bean gum) 9000-65-1 (Tragacanth gum) 9002-88-4 (Polyethylene) 9002-89-5 (Polyvinyl alcohol) 9003-01-4 (Polyacrylic acid) 9003-11-6 (Ethylene oxide-propylene oxide copolymer) 9003-39-8 (PVP) 9004-34-6 (Cellulose) 9004-35-7 (Cellulose acetate) 9004-38-0 (Cellulose acetate phthalate) 9004-57-3 (Ethyl cellulose) 9004-64-2 (Hydroxypropyl cellulose) 9004-65-3 (Hydroxypropyl methyl cellulose) 9004-67-5 (Methyl cellulose) 9005-25-8 (Starch) 9036-66-2 (Arabinogalactan) 9050-31-1 (Hydroxypropyl methyl cellulose phthalate) 11099-07-3 (Glycerol stearate)

11138-66-2 (Xanthan gum) 15687-27-1 (Ibuprofen) 18323-44-9 (Clindamycin) 22204-53-1 (Naproxen)

24937-78-8 (Ethylene-vinyl acetate copolymer)

25213-24-5 (Vinyl alcohol-vinyl acetate copolymer)

29679-58-1 (Fenoprofen)

64044-51-5 (Lactose monohydrate)

REGISTRY NUMBER:

103-90-2; 5965-66-2; 9004-32-4; 9050-04-8

L79 ANSWER 27 OF 37 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN

ACCESSION NUMBER:

2003-903162 [82] WPIDS

DOC. NO. CPI:

C2003-256635

TITLE:

Composition useful for preservation of e.g. virus

comprises a bioactive material prepared by

freeze-drying a liquid formulation comprising the

material by immersion into a cold fluid.

DERWENT CLASS:

A96 **B04** D16

INVENTOR(S):

CARPENTER, J F; PHAM, B V; TRUONG-LE, V

PATENT ASSIGNEE(S):

(MEDI-N) MEDIMMUNE VACCINES INC

COUNTRY COUNT: 103

PATENT INFORMATION:

PATENT	NO	KIND	DATE	WEEK	LA	PG	MAIN	IPC

WO 2003087339 A2 20031023 (200382)* EN 34 C12N000-00

RW: AT BE BG CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IT KE LS LU MC MW MZ NL OA PT RO SD SE SI SK SL SZ TR TZ UG ZM ZW

W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NI NO NZ OM PH PL PT RO RU SC SD SE SG SK SL TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

APPLICATION DETAILS:

APPLICATION PATENT NO KIND DATE _____ WO 2003087339 A2 WO 2003-US11447 20030410

PRIORITY APPLN. INFO: US 2002-372242P 20020411

INT. PATENT CLASSIF.:

MAIN:

C12N000-00

BASIC ABSTRACT:

WO2003087339 A UPAB: 20031223

NOVELTY - A composition comprising a bioactive material is

prepared by a process involving:

(1) spraying a liquid formulation comprising the material to form droplets;

(2) freezing the droplets by immersion into a cold fluid; and

(3) drying the droplets to form powder particles.

The bioactive material comprises virus, bacteria, cell, or liposomes. An average physical size of the powder particles is 0.5 - 20 micro m.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is included for an apparatus for preparation of spray freeze dried particles for pulmonary administration comprising: the liquid formulation; nozzle for spraying the liquid formulation to form droplets; cold fluid into which the droplets are immersed to form frozen droplets (1 - 20 micro m); and a drying chamber for drying the frozen droplets.

ACTIVITY - Virucide.

MECHANISM OF ACTION - Vaccine.

USE - For preservation and pulmonary administration of **bioactive** materials such as bacteria, cell, liposomes, virus (e.g. influenza virus, parainfluenza virus, human metapneumovirus, respiratory syncitial virus, corona virus family members, herpes simplex virus, severe acute respiratory syndrome (SARS) virus, cytomegalo virus, or Epstein-Barr virus) (claimed) for treatment of disorders associated with e.g. cold or flu. Used as vaccine.

ADVANTAGE - The composition exhibits improved stability and enhances shelf-life of sensitive biological materials in storage at temperature above freezing (e.g. at 25 deg. C for at least 1 year, or at 4 deg. C for more than 2 years) as the moisture content of the particles is 1-5 wt.%. Spray freeze-drying reduces heat stress by processing formulations in a cold environment and providing surface to volume ratio favorable to quick drying. The particles have an average aerodynamic size of 0.5-10 (preferably 3) micro m; an average physical diameter of 1-20 micro m, and a density less than 0.9 (preferably 0.5-0.2) g/cc, hence the **bioactive** material can reach the alveolar sacs deep in the lungs.

Dwg.0/7

FILE SEGMENT: CPI

FIELD AVAILABILITY: AB; DCN

MANUAL CODES: CPI: A12-V01; B04-C03; B04-N02; B07-A02A; B07-A02B;

B10-A07; B10-E04C; B14-A02; B14-S11; B14-S11A;

D05-H07

L79 ANSWER 28 OF 37 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN

ACCESSION NUMBER: 2003-9031

2003-903160 [82] WPIDS

DOC. NO. CPI:

C2003-256633

TITLE:

Dry foam composition useful for preservation of **bioactive** material comprises material prepared by cooling a formulation of the material, **polyol**

or polymer; and expanding the formulation followed by

drying.

DERWENT CLASS: A96 B04 D16

INVENTOR(S): TRUONG-LE, V; VU, T

PATENT ASSIGNEE(S): (MEDI-N) MEDIMMUNE VACCINES INC

COUNTRY COUNT: 103

PATENT INFORMATION:

PATENT NO KIND DATE WEEK LA PG MAIN IPC

WO 2003087327 A2 20031023 (200382)* EN 36 C12N000-00

RW: AT BE BG CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IT KE LS

LU MC MW MZ NL OA PT RO SD SE SI SK SL SZ TR TZ UG ZM ZW

W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NI NO NZ OM PH PL PT RO RU SC SD SE SG SK SL TJ TM TN TR TT TZ UA UG US UZ VC VN YU

ZA ZM ZW

US 2003219475 A1 20031127 (200402)

A61K039-245

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 20030873 US 20032194	327 A2 475 Al Provisional	WO 2003-US10989 US 2002-372236P US 2003-412630	20030410 20020411 20030410

PRIORITY APPLN. INFO: US 2002-372236P 20020411; US 2003-412630

20030410

INT. PATENT CLASSIF .:

MAIN: A61K039-245; C12N000-00

09/923023 Krishnan Page 49

SECONDARY:

A61K009-127; A61K039-12; A61K039-145; A61K039-215; A61K039-23; A61K039-235

BASIC ABSTRACT:

WO2003087327 A UPAB: 20031223

NOVELTY - A stable dry foam composition comprising a bioactive

material is prepared by:

(1) cooling a formulation of the material, polyol or polymer;

(2) expanding the formulation; and

(3) drying the foam by evaporation, freezing or sublimation.

The bioactive material comprises a lipid membrane.

ACTIVITY - Virucide.

MECHANISM OF ACTION - Vaccine.

USE - For preservation of bioactive materials such as peptides, proteins, hormones, nucleic acids, antibodies, bacteria, cell suspensions, platelets, liposomes, and viruses (e.g. influenza virus, parainfluenza virus, Adenoassociated virus, adenovirus, human metapneumovirus, respiratory syncitial virus, corona virus family members, herpes simplex virus, severe acute respiratory syndrome (SARS) virus, cytomegalo virus, or Epstein-Barr virus) in lyophilized dry form (claimed) useful as vaccine for treatment of disorders associated with e.g. cold or

ADVANTAGE - The dry foam composition has a moisture content of (0.1 -5)% and remains stable for at least 1 year in storage at 25 deg. C. The composition is ground powder having an average particle size of 0.1 - 100 (preferably 50 - 100) micro m, hence can reach alveolar sac of the lungs easily and effectively.

Dwq.0/8

FILE SEGMENT: CPI

FIELD AVAILABILITY:

AB; DCN

MANUAL CODES:

CPI: A12-V01; B04-C02; B04-C03; B04-N02; B07-A02A; B07-A02B; B10-A07; B10-E04C; B11-C09; B12-M05; B12-M06; B14-A02; B14-S11; B14-S11A; D05-H07

L79 ANSWER 29 OF 37 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN

ACCESSION NUMBER: 2003-903074 [82] WPIDS

DOC. NO. CPI:

C2003-256547

TITLE:

Composition useful for preservation of e.g. virus

comprises a bioactive material prepared by

freeze-drying a liquid formulation comprising the

material by immersion into a cold fluid.

DERWENT CLASS:

A96 **B04** D16

INVENTOR(S):

CARPENTER, J F; PHAM, B V; TRUONG-LE, V

PATENT ASSIGNEE(S):

(MEDI-N) MEDIMMUNE VACCINES INC

COUNTRY COUNT:

103 PATENT INFORMATION:

> PATENT NO KIND DATE WEEK LA PG MAIN IPC

> WO 2003086443 A1 20031023 (200382)* EN 35 A61K035-78

RW: AT BE BG CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IT KE LS

LU MC MW MZ NL OA PT RO SD SE SI SK SL SZ TR TZ UG ZM ZW

W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR

KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NI NO NZ OM PH PL

PT RO RU SC SD SE SG SK SL TJ TM TN TR TT TZ UA UG US UZ VC VN YU

ZA ZM ZW

APPLICATION DETAILS:

APPLICATION PATENT NO KIND ~-----

WO 2003086443 A1

WO 2003-US11405 20030410

PRIORITY APPLN. INFO: US 2002-372175P 20020411

INT. PATENT CLASSIF.:

MAIN: A61K035-78 SECONDARY: A61K031-70

BASIC ABSTRACT:

WO2003086443 A UPAB: 20031223

NOVELTY - A composition of particles comprising a bioactive material is prepared by:

- (1) spraying a liquid formulation comprising the material to form droplets;
 - (2) freezing the droplets by immersion into a cold fluid; and
- (3) drying the droplets to form powder particles, where an average physical size of the particles is 10 - 200 (preferably 20) micro m, is

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for an apparatus for preparation of spray freeze-dried particles for intranasal administration comprising:

- (1) the liquid formulation;
- (2) nozzle for spraying the liquid formulation to form droplets;
- (3) cold fluid into which the droplets are immersed to form frozen droplets (10 - 200 micro m); and
- (4) a drying chamber for drying the frozen droplets to form particles having average aerodynamic size of 10 - 150 micro m.

ACTIVITY - Virucide.

No biological data given.

MECHANISM OF ACTION - Vaccine.

No biological data given.

USE - The composition of particles is used for preservation and intranasal administration of bioactive materials such as peptide, polypeptide, protein, nucleic acid, bacteria, antibody, cell, liposome, and virus (e.g. influenza virus, parainfluenza virus, human metapneumovirus, respiratory syncitial virus, corona virus family members, herpes simplex virus, severe acute respiratory syndrome (SARS) virus, cytomegalovirus, or Epstein-Barr virus) (claimed); for treating disorders associated with e.g. cold or flu.

ADVANTAGE - The composition exhibits improved stability and enhances shelf-life of sensitive biological materials in storage at temperature above freezing (e.g. at 25 deg. C for at least 1 year, or at 4 deg. C for more than 2 years) as the moisture content of the particles is 1 - 5 wt.%. Spray freeze-drying reduces heat stress by processing formulations in a cold environment and providing surface to volume ratio favorable to quick drying. The particles have an average aerodynamic size of 10 - 200 (preferably 20) micro m; an average physical diameter of 10 - 200 micro m, and a density of less than 0.9 (preferably 0.5 - 0.2) g/cc, hence the bioactive material can reach the alveolar sacs deep in the lungs. Dwg.0/7

FILE SEGMENT: CPI

FIELD AVAILABILITY:

MANUAL CODES:

AB; DCN

CPI: A12-V01; B04-B01B; B04-C01; B04-C02; B04-C03; B04-D01; B04-E01; B04-F01; B04-F10; B04-F11;

B04-G01; B04-N02; B04-N04; B05-A01B; B05-B01B; B05-B01P; B05-B02C; B05-C01; B05-C03; B05-C04;

B05-C08; B07-A02A; B07-A02B; B07-D09; B10-A03;

B10-A07; B10-A09A; B10-A09B; B10-A22; B10-B02J; B10-C04E; B10-D03; B10-E04C; B10-E04D; B10-G02; B11-C05; B11-C09; B12-M09; B12-M11F; B12-M11G;

B14-S11A; D05-H07; D05-H11

ACCESSION NUMBER:

L79 ANSWER 30 OF 37 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN 2003-636536 [60] WPIDS

DOC. NO. CPI:

C2003-173927

Page 51

TITLE:

Solid pharmaceutical composition for parenteral administration of e.g. analgesic, comprises coated inner matrix coated that disintegrates upon contact

with animal tissue or tissue fluids.

DERWENT CLASS:

A96 B07 D22

INVENTOR(S):

BUCH-RASMUSSEN, T; HANSEN, H E; SABRA, M C; RASMUSSEN, T

R

PATENT ASSIGNEE(S):

(BUCH-I) BUCH-RASMUSSEN T; (HANS-I) HANSEN H E; (SABR-I)

SABRA M C; (NOVO) NOVO NORDISK AS

COUNTRY COUNT:

PATENT INFORMATION:

PATENT NO KIND DATE WEEK LA PG MAIN IPC

WO 2003051328 A1 20030626 (200360)* EN 51 A61K00,9-00

RW: AT BE BG CH CY CZ DE DK EA EE ES FI FR GB GH GM GR IE IT KE LS LU

MC MW MZ NL OA PT SD SE SI SK SL SZ TR TZ UG ZM ZW

W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SC SD SE SG SK SL TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA

ZM ZW

US 2003161881 A1 20030828 (200363)

A61K009-22

APPLICATION DETAILS:

PATENT NO	KIND		APPLICATION	DATE
WO 20030513 US 20031618		ovisional	WO 2002-DK865 US 2001-342065 US 2002-322143	

PRIORITY APPLN. INFO: DK 2001-1901 20011218

INT. PATENT CLASSIF.:

MAIN:

A61K009-00; A61K009-22

SECONDARY:

A61K009-14; A61K009-36; A61K038-28; A61K047-14

BASIC ABSTRACT:

WO2003051328 A UPAB: 20030919

NOVELTY - A solid pharmaceutical composition comprises an inner matrix comprising therapeutic agent(s), and biodegradable and water-impermeable coating covering part of the surface of the composition. The inner matrix disintegrates upon contact with animal tissue or tissue fluids.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for manufacturing the above composition by coating a mold with a biodegradable polymer, melting and injecting an inner matrix comprising a therapeutic agent(s) into the mold, hardening the mold, and cutting the resulting rod into elongated compositions.

USE - For parenteral administration of therapeutic agents, e.g. analgesics, antianxiety drugs, antiarthritic drugs, antibiotic agents, anticholinergics, antidepressants, antidiabetics, antiemetics, antihistaminics, antihypertensive agents, antiinflammatory drugs, antimigraine agents, antiparkinsonism agents, antipasmodesics, antipsychotics, antithrombotic agents, antiviral agents, appetite suppressants, blood factors, cardiovascular drugs, cerebral vasodilators, chemotherapeutic drugs, cholinergic agonists, contraceptives, coronary agents, diuretics, hormonal agents, immunosuppressive agents, growth factors, narcotic antagonists, opiods, peripheral asodilators, tranquilizers, vaccines, immunogenic agents, or immunizing agents. The therapeutic agent also includes hormones, lipids, nucleic acids, nucleotides, oligonucleotides, oligosaccharides, organics, peptides, mimetics, antibodies, peptides, polysaccharides, or protein; or

coagulation factors such as FVII, and FVIII, GLP-1, EPO, TPO, interferon or their derivatives. It is for parenteral injection in an animal consisting of fish, birds, molluscs, reptiles, or mammals including human. It is used for immunization (all claimed).

ADVANTAGE - By providing a disintegratable and/or soluble inner matrix, the rate of release of the drug can be controlled, thus providing a more constant release rate. The whole composition is broken down completely in the tissue within short period than to the time required for release of the therapeutic agent. Surgery is not required to remove the composition after release of the therapeutic agent, and local irritation cased by the composition is a very limited. The composition can penetrate the epidermis or mucosa of a human being at a force of less 5 ${ t N}$ without or with the use of trocar of syringe.

Dwa.0/9

FILE SEGMENT: CPI FIELD AVAILABILITY: AB: DCN

MANUAL CODES:

CPI: A12-V01; B02-Z; B04-B01B; B04-B03B; B04-B03C; B04-C01; B04-C02; B04-C03; B04-D01; B04-E01; B04-G01; B04-H01; B04-H05; B04-H06; B04-H07; B04-H19; B04-J01; B04-J03; B04-N02; B04-N04; B05-B01P; B07-A02B; B10-A07; B10-C04E; B12-M05; B12-M10C; B14-A02; B14-C01; B14-C03; B14-C09; B14-E05; B14-E12; B14-F01; B14-F02B; B14-F02D; B14-F02D1; B14-F04; B14-G01; B14-G02; B14-G03; B14-J01A3; B14-J01B4; B14-J02A1; B14-J02B1; B14-J05D; B14-J07; B14-L06; B14-L09; B14-N16; B14-P01; B14-S11; D09-C04

L79 ANSWER 31 OF 37 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN

ACCESSION NUMBER:

2003-605712 [57] WPIDS

CROSS REFERENCE:

1992-090052 [12]; 1993-312039 [40]

DOC. NO. CPI:

C2003-164834

TITLE:

Method of processing collagen based tissues e.g. skin and blood vessels for transplantation involves procuring and

processing the tissue to remove cellular components.

DERWENT CLASS:

A96 **B04 B05** D16 D22 E19

INVENTOR(S):

CAMPO, A A D; COLEMAN, C; GRIFFEY, E S; LIVESEY, S A;

NAG, A; NICHOLS, K B (LIFE-N) LIFECELL CORP

PATENT ASSIGNEE(S):

COUNTRY COUNT:

PATENT INFORMATION:

PATENT NO KIND DATE WEEK LA PG MAIN IPC -----US 2003035843 A1 20030220 (200357)* 19 C12N005-08

APPLICATION DETAILS:

PATENT NO KIND	APPLICATION	DATE
US 2003035843 A1 CIP of CIP of CIP of CIP of CONT of Cont of	US 1990-581584 US 1991-709504 US 1992-835138 US 1993-4752 US 1994-227264 US 1996-759801 US 2002-165790	19900912 19910603 19920212 19930202 19940413 19961203 20020607

FILING DETAILS:

PATENT	NO	KIND			PAT	ENT	NO	
								_
US 2003	303584	3 A1	CIP	of	US	5336	5616	

PRIORITY APPLN. INFO: US 1994-227264 19940413; US 1990-581584 19900912; US 1991-709504 19910603; US 1992-835138 19920212; US 1993-4752 19930202; US 1996-759801 19961203; US 2002-165790 20020607

INT. PATENT CLASSIF .:

MAIN:

C12N005-08

SECONDARY:

A61K035-30; A61K035-32; A61K035-34; A61K035-44

BASIC ABSTRACT:

US2003035843 A UPAB: 20030906

NOVELTY - A method of processing collagen based tissue comprising procuring and processing the tissue to remove cellular components, is new. USE - For processing collagen based tissue (e.g. skin, blood vessels, heart valves, ligaments, tendons, bone, cartilage, duramater, nerves and other similar tissues derived from one or more mammals) for

transplantation (claimed) useful to generate a transplantable biological

tissue graft.

ADVANTAGE - The method combines both biochemical and physical processing steps to achieve the ideal features of template function such that the tissue graft can be remodeled for long-term maintenance by the host. The transplantable biological tissue graft generated by the process provides an extracellular protein and collagen matrix, which can be remodelled and repaired by the host, provides an intact basement membrane for secure reattachment of viable endothelial cells, does not elicit an immune response by the host, does not calcify, and can be stored and transported at ambient temperature.

Dwg.0/0

FILE SEGMENT: FIELD AVAILABILITY:

CPI AB; DCN

MANUAL CODES:

CPI: A03-C01; A12-V02; B01-D02; B04-C02; B04-C03; B04-F01; B04-L01; B04-N04; B05-A01B; B05-A03A; B05-B02A3; B05-C01; B05-C03; B05-C07; B05-C08;

B06-A01; B06-A02; B06-D09; B06-E05; B07-A02A; B07-A02B; B07-D03; B07-D09; B07-D10; B07-D13; B07-F01; B09-D01; B10-A07; B10-A09A; B10-A10; B10-A13D; B10-A17; B10-B01B; B10-B02D; B10-B02J; B10-B03B; B10-C03; B10-D01; B10-D03; B10-E02; B10-E04C; B11-A; B11-B; B11-C08D; B11-C09; D05-A02;

D05-H01; D05-H08; D05-H13; E06-H; E07-H; E09-D01; E10-A07; E10-A09B1; E10-A13B2; E10-A17B; E10-B01C1; E10-B02D1; E10-B02D6; E10-B02E; E10-B03B1; E10-C02A; E10-C03; E10-C04J2U; E10-D01D; E10-E02D5; E31-H05;

E31-K05D; E32-A04

ACCESSION NUMBER:

L79 ANSWER 32 OF 37 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN

2002-479639 [51] WPIDS

DOC. NO. CPI:

C2002-136479

TITLE:

Vitrification of natural or engineered tissue or organ other than blood vessel involves immersing tissue in cryoprotectant solutions with increasing concentrations

and cooling to below glass transition

temperature.

DERWENT CLASS:

A96 D22 E19 G04 J07

INVENTOR(S): PATENT ASSIGNEE(S): BROCKBANK, K G M; KHIRABADI, B S; SONG, Y C

(ORGA-N) ORGAN RECOVERY SYSTEMS; (ORGA-N) ORGAN RECOVERY

SYSTEMS INC

COUNTRY COUNT:

95

PATENT INFORMATION:

PATENT NO KIND DATE WEEK PG MAIN IPC LA ------WO 2002032225 A2 20020425 (200251) * EN 32 A01N001-02

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RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW
```

W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD

SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW

AU 2002011792 A 20020429 (200255) A01N001-02 EP 1326492 A2 20030716 (200347) EN A01N001-02

R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI TR

APPLICATION DETAILS:

PATENT NO K	IND	AP	PLICATION	DATE
WO 2002032225 AU 2002011792 EP 1326492		AU EP	2001-US32415 2002-11792 2001-979871 2001-US32415	20011018 20011018 20011018 20011018

FILING DETAILS:

PAT	TENT	NO	KIND			PAS	rent	NO
ΑU	2002	201179	2 A	Based	on	WO	2002	032225
EΡ	1326	6492	A2	Based	on	WO	2002	032225

PRIORITY APPLN. INFO: US 2000-691197 20001019

INT. PATENT CLASSIF.:

MAIN:

A01N001-02

BASIC ABSTRACT:

WO 200232225 A UPAB: 20020812

NOVELTY - A natural or engineered tissue or organ other than a blood vessel is vitrified by:

- (i) immersing it in a series of solutions having increasing concentrations of cryoprotectant to achieve a cryoprotectant concentration for vitrification;
- (ii) rapidly cooling to between -80 deg. C and the ${\tt glass}$ transition temperature (Tg); and
 - (iii) further cooling to below Tg.

DETAILED DESCRIPTION - Vitrification of a natural or engineered tissue or organ other than a blood vessel comprises:

- (i) immersing the tissue (3) or organ in a series of solutions having increasing concentrations of cryoprotectant and each having a temperature above -15 deg. C;
- (ii) cooling the tissue of organ at 2.5-100 deg. C per minute from a temperature above -15 deg. C to between -80 deg. C and the Tg; and
- (iii) further cooling at average rate less than 30 deg. C per minute from between -80 deg. C and the Tg to below the Tg to vitrify the tissue or organ.

An INDEPENDENT CLAIM is also included for a method for removing a tissue or organ other than a blood from vitrification in a solution containing cryoprotectant by:

- (a) warming the vitrified tissue or organ in a solution containing cryoprotectant at an average rate of 20-40 deg. C per minute to between -80 deg. C and the Tg;
- (b) further warming in the solution at an average rate of 200-300 deg. C per minute to a temperature above -75 deg. C; and
- (c) immersing the tissue or organ in a series of solutions having decreasing concentrations of cryoprotectant.
- USE For vitrifying a natural or engineered tissue or organ other than a blood vessel, particularly musculoskeletal tissue, cartilage, menisci, muscles, ligaments, tendons, skin, cardiovascular tissue, heart

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valves, myocardium, periodontal tissue, glandular tissue, islets of Lange, cornea, ureter, urethra, pancreas, bladder, kidney, breast, liver, intestine or heart.

ADVANTAGE - The vitrification method results in a greater number or percentage of viable cells in a tissue or organ sample, compared to conventional cryopreservation techniques. It results in tissue or organ samples having at least 50% viable cells.

DESCRIPTION OF DRAWING(S) - The figure shows a perfusion system that can be used in the invention.

Tissue 3 Dwg.1/4

FILE SEGMENT: CPI

FIELD AVAILABILITY: AB; GI; DCN

MANUAL CODES:

CPI: A12-V; A12-V02; D09-A; E05-G09D; E07-A02A; E07-A02D;

E07-A02H; E07-D03; E07-D04A; E10-A07; E10-A10A;

E10-A13B2; E10-A22E; E10-B02D4; E10-B02D6; E10-C04J2U; E10-D03C1; E10-D03C3; E10-E02E1;

E10-E04G; E10-E04H; E10-E04J; E10-E04L1; E10-E04L2; E10-E04M4; E10-H04C4; E31-H05; E33-B; E33-C; E33-E;

E34-B03; G04-B; G04-B01; J07-D

WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN L79 ANSWER 33 OF 37

ACCESSION NUMBER:

2001-502406 [55] WPIDS

CROSS REFERENCE:

2001-514226 [56]

DOC. NO. NON-CPI:

N2001-372640

DOC. NO. CPI:

C2001-151043

TITLE:

Hybrid composition used for e.g. bone repair, comprises water-based liquid component comprising cationic polymers and mono-phosphate salt, and powder component comprising

calcium phosphate sources.

DERWENT CLASS:

A96 B07 D22 E19 P34 CHAPUT, C; CHENITE, A

INVENTOR(S): PATENT ASSIGNEE(S):

(BIOS-N) BIO SYNTECH CANADA INC; (BIOS-N) BIOSYNTECH

CANADA INC; (CHAP-I) CHAPUT C; (CHEN-I) CHENITE A

COUNTRY COUNT:

PATENT INFORMATION:

PATENT	NO	KIND	DATE	WEEK	LA	PG	MAIN	IPC

WO 2001041822 A1 20010614 (200155)* EN 80 A61L024-00

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ

NL OA PT SD SE SL SZ TR TZ UG ZW

W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE

SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

AU 2001019792 A 20010618 (200161) A61L024-00 EP 1255576 A1 20021113 (200282) EN A61L024-00

R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT

RO SE SI TR

B1 20030820 (200356) EN EP 1255576 A61L024-00

R: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

US 2003158302 A1 20030821 (200356) C08K005-49

E 20030925 (200371) DE 60004710

A61L024-00

APPLICATION DETAILS:

PATENT NO KIND	APPLICATION	DATE
WO 2001041822 A1	WO 2000-CA1492	20001208
AU 2001019792 A	AU 2001-19792	20001208
EP 1255576 A1	EP 2000-982802	20001208
	WO 2000-CA1492	20001208

ΕP	1255576	B1	ΕP	2000-982802	20001208
			WO	2000-CA1492	20001208
US	2003158302	A1	WO	2000-CA1492	20001208
			US	2002-149053	20021203
DE	60004710	E	DE	2000-604710	20001208
			EΡ	2000-982802	20001208
			WO	2000-CA1492	20001208

FILING DETAILS:

PATENT N	O KIND			PAI	TENT NO
	19792 A	Based	on	WO	2001041822
EP 12555	576 A1	Based	on	WO	2001041822
EP 12555	576 B1	Based	on	WO	2001041822
DE 60004	710 E	Based	on	EΡ	1255576
		Based	on	WO	2001041822

PRIORITY APPLN. INFO: US 1999-169954P 19991209

INT. PATENT CLASSIF.:

MAIN: A61L024-00; C08K005-49

SECONDARY: A61K009-00; A61K047-36; A61L024-08; A61L027-20;

A61L027-24; A61L027-32; A61L027-52; C08K003-10;

C08K003-26; C08K003-32; C08L005-08

BASIC ABSTRACT:

WO 200141822 A UPAB: 20031105

NOVELTY - Hybrid composition (A) comprises:

- (1) a water-based, thermo-gelling liquid comprising at least one water soluble cationic polymer, organic monophosphate source and optionally one water soluble organic monosulfonate, monosulfate or monocarboxylate source, and
- (2) a solid component having calcium, fluoride, strontium, carbonate, and/or phosphate salt.

The composition gels at body temperature.

DETAILED DESCRIPTION - In situ self forming mineral polymer hybrid composition (A) comprises:

- (1) a water-based, thermo-gelling liquid comprising at least one water soluble cationic polymer, organic monophosphate source and optionally one water soluble organic monosulfonate, monosulfate or monocarboxylate source, and having a pH of 6.5-7.4; and
- (2) a solid component having calcium, fluoride, strontium, carbonate, and/or phosphate salt.

The composition gels at body temperature.

An INDEPENDENT CLAIM is also included for the preparation of (A) which comprises:

- (a) preparing a first water-based liquid sub-component comprising hydrosoluble cationic polymer and at least 0.5% w/v chitosan, where the first sub-component is stable at below 10 deg. C;
- (b) preparing a second water-based liquid sub-component comprising at least one organic monophosphate source, and optionally a water-soluble organic monosulfonate, monosulfate, or monocarboxylate source;
 - (c) preparing the solid component;
- (d) homogeneously mixing the second liquid sub-component and the solid component to form a dispersion that is stable at room temperature or below, and
 - (e) mixing the first liquid sub-component with the dispersion. ACTIVITY Osteopathic.

MECHANISM OF ACTION - None given.

USE - The composition is used for repair, regeneration, filling, and replacement of mammalian or human hard tissues e.g. bone, dentine, and enamel (claimed); as well as delivering drugs or bioreactive reagents to these tissues. Particularly, the composition can be injected into a defect, cavity, or interface of a body tissue e.g. a cancellous, cortical,

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or corticocancellous bone or hyaline or fibro-cartilage tissue (claimed). It may also be injected to the metaphysis or diaphysis of a bone or fractured bone (claimed). The composition is also used to retain orthopedic devices e.g. pin, prosthesis, and biodegradable fixation. It may also be used in orthopedic, plastic, cranio-maxillofacial, or dental surgery (claimed). It is also used in solitary bone lesions such as those observed in osteomyelitis, round cell lesions, fibrous displasia, bone cyst, chondromyxioid fibroma, osteosarcoma, non-ossifying sarcoma, endochondroma, chondroblastoma, and joint revision osteolysis. It is further applied at the interface with prosthesis or implant such as prosthetic joint (hip or knee) or a screw (pedicular).

ADVANTAGE - The composition forms a consistent gel-looking material at 37 deg. C and 100% humidity. It can be remolded in situ and is resorbable.

Dwg.0/17

FILE SEGMENT: CPI GMPI FIELD AVAILABILITY: AB; DCN

MANUAL CODES:

CPI: A12-V02; B04-C02A; B04-C02E3; B04-C03A; B04-H06A; B04-J01; B04-N02; B05-A01A; B05-A01B; B05-A03; B05-B01P; B05-C04; B05-C05; B07-A02B; B07-D11; B10-A07; B10-A09A; B10-B03B; B10-E04C; B11-C04A; B14-N01; D09-C01D; E05-B01; E05-G; E10-A07; E10-C04J2; E10-C04L1; E31-K05B; E31-K05C; E33-D;

E34-B02; E34-D03; E35-C; E35-K04

L79 ANSWER 34 OF 37

WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN

ACCESSION NUMBER:

2001-006946 [01] WPIDS

DOC. NO. CPI:

C2001-001620

TITLE:

Solid pharmaceutical compositions for parenteral

injection, comprising a binder and therapeutic agent(s) e.g. insulin, can be injected without cannulae and are stable long-term, solid and moldable.

DERWENT CLASS:

INVENTOR(S):

AASMUL, S; BUCH-RASMUSSEN, T; FLINK, J M; HANSEN, P;

JUUL-MORTENSEN, C; POULSEN, J

PATENT ASSIGNEE(S):

COUNTRY COUNT:

(NOVO) NOVO NORDISK AS

93

PATENT INFORMATION:

PATENT	NO	KIND	DATE	WEEK	LA	PG	MAIN	IPC

WO 2000062759 A1 20001026 (200101) * EN 40 A61K009-14

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SL SZ TZ UG ZW

W: AE AG AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI

SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

AU 2000039574 A 20001102 (200107)

EP 1173151 A1 20020123 (200214) ENA61K009-14

R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI

JP 2002542183 W 20021210 (200301) 51 A61K009-14 EP 1173151 B1 20030709 (200353) EN

A61K009-14 R: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DE 60003803 20030814 (200361) Ε A61K009-14

APPLICATION DETAILS:

	KIND	APPLICATION	DATE
WO 20000627		WO 2000-DK184	20000413
AU 20000395	74 A	AII 2000-39574	20000413

ЕP	1173151	A1		EΡ	2000-918719	20000413
				WO	2000-DK184	20000413
JP	2002542183	W		JΡ	2000-611896	20000413
				WO	2000-DK184	20000413
EΡ	1173151	B1		EΡ	2000-918719	20000413
			×	WO	2000-DK184	20000413
DΕ	60003803	E		DE	2000-603803	20000413
				ΕP	2000-918719	20000413
				WO	2000-DK184	20000413

FILING DETAILS:

PATENT NO KI	IND	PATENT NO
AU 2000039574	A Based on	WO 2000062759
EP 1173151	Al Based on	WO 2000062759
JP 2002542183	W Based on	WO 2000062759
EP 1173151	B1 Based on	WO 2000062759
DE 60003803	E Based on	EP 1173151
	Based on	WO 2000062759

PRIORITY APPLN. INFO: DK 1999-514 19990416

INT. PATENT CLASSIF.:

MAIN:

A61K009-14

SECONDARY:

A61J003-02; A61K038-00; A61K038-28; A61K047-10;

A61K047-26; A61M005-142; A61P005-50

BASIC ABSTRACT:

WO 200062759 A UPAB: 20001230

NOVELTY - Solid pharmaceutical compositions for parenteral injection comprising a binder and at least one therapeutic agent consisting of at least one dosage, are new.

DETAILED DESCRIPTION - New pharmaceutical compositions for parenteral injection comprises a binder that constitutes at least 0.5 weight % of the composition. The composition comprises at least one binding agent that is a carbohydrate and optionally at least one non-crystallization agent, and forms an amorphous matrix.

INDEPENDENT CLAIMS are also included for the following:

(1) methods for preparing solid pharmaceutical compositions for parenteral injection; and

(2) devices containing the above-described solid pharmaceutical compositions adapted for injection through the epidermis or mucosa.

ACTIVITY - Analgesic; tranquilizer; antiarthritics; antibacterial; antidepressant; antidiabetics; antiemetic; hypotensive; antiinflammatory; antimigraine; antiparkinsonian; thrombolytic; antiviral; anorectic; cardiant; vasodilator; contraceptive; diuretic; hormonal; immunosuppressant; immunomodulator. No biological data is given.

MECHANISM OF ACTION - Vaccine; narcotic antagonist.

USE - The parenteral injection compositions are used to administer analgesics, anxiolytics, anti-arthritics, antibiotics, anticholinergics, antidepressants, antidiabetics, anti-emetics, antihistaminics, antihypertensives, anti-inflammatories, antimigraine agents, antiparkinsonism agents, antipasmodesics, antipsychotics, antithrombotics, antivirals, appetite suppressants, blood factors, cardiovascular drugs, cerebral vasodilators, chemotherapeutics, cholinergic agonists, contraceptives, coronary agents, diuretics, hormonal agents, immunosuppressants, growth factors, narcotic antagonists, opioids, peripheral vasodilators, tranquilizers, vaccines, immunogenic agents, immunizing agents, hormones, lipids, nucleic acids, nucleotides, oligonucleotides, oligosaccharides, organics, peptidomimetics, antibodies, peptides, polysaccharides, proteins, peptides, polypeptides, growth factors or blood factor, particularly insulin, glucagon, growth hormone, growth factors such as FVII or FVIII, GLP-1, erythropoietin, thrombopoietin, interferon or their derivatives (claimed). They may be

used for immunization (claimed).

ADVANTAGE - The compositions can be injected without the use of cannulae. They are long-term stable, solid and moldable. They have sufficient strength for parenteral injection but have a large content of therapeutic agent. They are particularly suitable for patients requiring frequent medication. They can be administered using epidermal or mucosal injection devices that provide easy, rapid and essentially painless injection. The avoidance of needles eliminates one source for cross-contamination in hospitals. They are stable long-term, even at ambient temperature and do not require special storage conditions. are stable at ambient temperature in terms of compressive strength, the glassy nature of the binder and the geometry. Dwg.0/0

FILE SEGMENT: CPI

FIELD AVAILABILITY:

MANUAL CODES:

AB; DCN

CPI: B04-B01B; B04-B03B; B04-B04D2; B04-D01; B04-E01;

B04-G01; B04-H05; B04-H06; B04-H07; B04-H19; B04-J01; B04-J03A; B04-J03B; B04-J05; B04-N04;

B11-B; B11-C04; B14-A01; B14-A02; B14-C01; B14-C03;

B14-C09; B14-D01; B14-E05; B14-E12; B14-F01; B14-F02; B14-F02B; B14-F02D; B14-F02D1; B14-F04;

B14-G02; B14-G03; B14-J01A3; B14-J01B3; B14-J01B4;

B14-L01; B14-L06; B14-L09; B14-N08; B14-P01;

B14-S04; B14-S11

ANSWER 35 OF 37 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN

ACCESSION NUMBER:

2000-482716 [42]

DOC. NO. CPI: TITLE:

C2000-145245

Barrier method for preserving biological solutions or

suspensions by vitrification.

DERWENT CLASS:

INVENTOR(S):

PATENT ASSIGNEE(S):

COUNTRY COUNT:

PATENT INFORMATION:

B04 C07 D16 D22

BRACKEN, K R; BRONSHTEIN, V; LIVERS, R K; WILLIAMS, D R

(UVPR-N) UNIVERSAL PRESERVATION TECHNOLOGIES INC

WPIDS

PATENT NO KIND DATE WEEK PG MAIN IPC LA

WO 2000040696 A1 20000713 (200042)* EN 28 C12N001-04

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL

OA PT SD SE SL SZ TZ UG ZW

W: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL

TJ TM TR TT TZ UA UG UZ VN YU ZA ZW

AU 2000024895 A 20000724 (200052) C12N001-04 US 6306345

B1 20011023 (200165) B01J019-00 A1 20011010 (200167) EN EP 1141232 C12N001-04

R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL RO

SI

JP 2002534079 W 20021015 (200282)

40 C12N001-00

APPLICATION DETAILS:

PAT	ENT NO K	IND		API	PLICATION	DATE
	2000040696				2000-US142	20000105 20000105
	6306345		Provisional	US	2000-24895 1998-84451P	19980506
			Provisional Provisional		1999-114774P 1999-114775P	19990105 19990105
	1141000	- 1			1999-306137	19990506
EP	1141232	Al		ĽР	2000-903099	20000105

JP 2002534079 W

WO 2000-US142 20000105 JP 2000-592394 20000105 WO 2000-US142 20000105

FILING DETAILS:

PAT	CENT NO F	KIND			PA:	TENT NO
AU	2000024895	5 A	Based	on	WO	2000040696
ΕP	1141232	A 1	Based	on	WO	2000040696
JΡ	2002534079	W	Based	on	WO	2000040696

PRIORITY APPLN. INFO: US 1999-306137 19990506; US 1999-114774P 19990105; US 1999-114775P 19990105; US

1998-84451P 19980506

INT. PATENT CLASSIF.:

MAIN: B01J019-00; C12N001-00; C12N001-04

SECONDARY: A61G010-02; A61J003-00; A61J003-02; B01B001-00;

C12M001-00; C12M001-33; C12N009-00

BASIC ABSTRACT:

WO 200040696 A UPAB: 20000905

NOVELTY - A barrier method for preserving a biological solution or suspension as a powder, comprising: (a) drying the biological solution or suspension in a chamber by boiling under vacuum at a temperature in a range of -15 to 70 deg. C to form a mechanically-stable foam; and (b) crushing the mechanically-stable foam to form a powder.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for:

- (1) a barrier method for preparing a powdered formulation of preserved biological materials, comprising: (a) drying at least two solutions or suspensions containing a biological material by boiling under vacuum to form at least two mechanically-stable foams; crushing the mechanically-stable foams to form at least two powders; and (b) mixing the powders containing the biological materials to form a powdered formulation, wherein the biological materials are barrier-protected against exposure to an outside environment throughout the drying, crushing and mixing steps; and
- (2) an integrated apparatus for drying and crushing a biological solution or suspension, comprising a chamber having a heater and a cooler and a thermostat for regulating chamber temperature, a vacuum pump and a pressure-release valve for regulating chamber pressure, and a means for crushing a mechanically-stable porous foam.
- USE The method may be used to preserve biological solutions and suspensions containing peptides, proteins, antibodies, (co)enzymes, vitamins, serums, vaccines, viruses, liposomes, cells and some multicellular specimens.

Dwg.0/2

FILE SEGMENT: CPI FIELD AVAILABILITY: AB; DCN

MANUAL CODES:

CPI: B03-L; B04-B04D4; B04-F01; B04-F11; B04-G01; B04-L01; B04-N04; B12-M11F; C03-L; C04-B04D4; C04-F01; C04-F11; C04-G01; C04-L01; C04-N04;

C12-M11F; D05-A02A; D05-A02C; D05-H07; D05-H08;

D05-H11; D09-A02

L79 ANSWER 36 OF 37 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN

ACCESSION NUMBER:

2000-039497 [03] WPIDS 1998-032238 [03]; 1998-110384 [10]

CROSS REFERENCE: DOC. NO. CPI:

C2000-010346

TITLE: C2000-0

Preserving biological samples such as viruses, cells and

small multicellular specimens.

DERWENT CLASS: INVENTOR(S):

BO4 D16 D22 BRONSHTEIN, V

PATENT ASSIGNEE(S):

(UVPR-N) UNIVERSAL PRESERVATION TECHNOLOGIES INC

COUNTRY COUNT:
PATENT INFORMATION:

PATENT NO

KIND DATE WEEK LA PG MAIN IPC

ZA 9810789 A 19990929 (200003)* 21 C12N000-00 US 6509146 B1 20030121 (200309) A01N001-00

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
ZA 9810789 US 6509146	A Bl Provisional Provisional CIP of CIP of	ZA 1998-10789 US 1996-18573P US 1996-21796P US 1997-785472 US 1997-785473 US 1997-979458	19981125 19960529 19960715 19970117 19970117

FILING DETAILS:

PATENT NO	KIND	PATENT NO
IIS 6509146	B1 CTP of	US 5766520

PRIORITY APPLN. INFO: US 1997-9.79458 19971126; US 1996-18573P

19960529; US 1996-21796P 19960715; US

1997-785472 19970117; US 1997-785473 19970117

INT. PATENT CLASSIF.:

MAIN: A01N001-00; C12N000-00

SECONDARY: A01N001-02; A61K000-00; C12Q000-00

BASIC ABSTRACT:

ZA 9810789 A UPAB: 20030206

NOVELTY - Preserving a biological sample comprises drying the sample by boiling under a vacuum at -15 to 70 deg. C to form a mechanically stable foam which will not collapse for at least 1 hour at -20 deg. C under vacuum.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for the following:

- (1) a method of preserving a biological sample comprising:
- (i) primary drying of the sample by boiling under a vacuum at -15 to 70 deg. C to form a mechanically stable foam; and
- (ii) secondary drying of the foam for at least 12 hours under vacuum at 0 to 100 deg. C (the drying temperature is greater than the selected storage temperature within a range of 0 to 70 deg. C);
 - (2) a method of preserving a biological sample comprising:
- (i) primary drying of the sample by boiling under a vacuum at -15 to 70 deg. C to form a mechanically stable foam;
- (ii) secondary drying of the foam under vacuum at 0 to 100 deg. C for a period of time sufficient to increase the **glass** transition temperature of the material to a point above a selected storage temperature within a range of 0 to 70 deg. C; and
- (iii) cooling the material to a temperature less than or equal to the selected storage temperature;
- (3) a foam comprising a biologically active material and a **polyol** protectant, in which the foam is a mechanically stable porous structure comprising a thin amorphous film, which will not collapse for at least 1 hour when stored at -20 deg. C under vacuum; and
- (4) a composition of protected biologically active material in the **vitreous** state, produced by:
- (i) primary drying of a biologically active material by boiling under a vacuum to form a mechanically stable foam;
 - (ii) secondary drying of the foam for a period of time sufficient to

increase the glass transition temperature of the material to a point above a selected storage temperature within the range of 0-70 deg. C; and

(iii) cooling the material to a temperature of less than or equal to the storage temperature.

USE - The methods can be used for preserving solutions and suspensions containing biologically active molecules, viruses (e.g. vaccines), cells and small multicellular specimens. The methods can be used for long-term storage of these labile biological materials at ambient temperatures in dehydrated, very viscous amorphous liquid or glass state. The preservation and storage of these materials is important for food and microbiological industries, agriculture, medical and research purposes.

ADVANTAGE - The methods provide long-term storage of labile biological materials at ambient temperatures. Dehydrated reagents, materials and cells have reduced weight and require reduced space for storage and increased stability.

Dwq.0/6

FILE SEGMENT: CPI FIELD AVAILABILITY: AB; DCN

MANUAL CODES:

CPI: B04-B04L; B04-B04M; B04-C01; B04-C02; B04-C03; B04-F01; B11-B; B11-C06; B11-C08E1; B11-C09;

B12-M06; D05-A01C; D05-A03A; D05-H01; D05-H07;

D05-H08; D05-H10; D05-H13; D09-C

L79 ANSWER 37 OF 37 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN

ACCESSION NUMBER:

1999-105991 [09] WPIDS

DOC. NO. CPI:

C1999-031695

TITLE:

New modified glycoside(s) having good

solvent properties - useful, e.g. in solid delivery systems for dissolution, encapsulation, storage and

delivering therapeutic molecules.

DERWENT CLASS:

A60 B07 C07 D16 D25 E13 G02

INVENTOR(S):

COLACO, C

PATENT ASSIGNEE(S):

(QUAD-N) QUADRANT HOLDINGS CAMBRIDGE LTD; (ELAN-N) ELAN

DRUG DELIVERY LTD; (COLA-I) COLACO C

COUNTRY COUNT:

PATENT INFORMATION:

PATENT NO KIND DATE WEEK LA PG MAIN IPC -----

WO 9901463 A2 19990114 (199909)* EN 37 C07H000-00

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SZ UG ZW

W: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE GH GM GW HR HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA

UG US UZ VN YU ZW

A 19990125 (199923) AU 9882299 C07H000-00 A2 20000426 (200025) EN EP 994887 C07H001-00

R: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

US 2002009464 A1 20020124 (200210) A61K038-43
JP 2002510316 W 20020402 (200225) 34 C07H015-04
EP 994887 B1 20021127 (200279) EN C07H001-00

R: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DE 69809746 E 20030109 (200312) C07H001-00 ES 2187038 T3 20030516 (200337) C07H001-00

APPLICATION DETAILS:

DATE PATENT NO KIND APPLICATION -----WO 9901463 A2 WO 1998-GB1962 19980703

AU	9882299	Α		AU	1998-82299		19980703
EΡ	994887	A2		ĔΡ	1998-932361		19980703
				WO	1998-GB1962		19980703
US	2002009464	A1	Provisional	US	1997-51727P		19970703
			Cont of	WO	1998-GB1962	_	19980703
	•		Cont of	US	1998-111925		19980708
				US	2001-923023		20010806
JΡ	2002510316	W		WO	1998-GB1962		19980703
				JP	1999-506677		19980703
ΕP	994887	В1		EP	1998-932361		19980703
				WO	1998-GB1962		19980703
DE	69809746	E		DE	1998-609746		19980703
				EP	1998-932361		19980703
				WO	1998-GB1962		19980703
ES	2187038	Т3		EP	1998-932361		19980703

FILING DETAILS:

PATENT NO KI	IND	PATENT NO
AU 9882299	A Based on	WO 9901463
EP 994887	A2 Based on	WO 9901463
JP 2002510316	W Based on	WO 9901463
EP 994887	B1 Based on	WO 9901463
DE 69809746	E Based on .	EP 994887
	Based on	WO 9901463
ES 2187038	T3 Based on	EP 994887

PRIORITY APPLN. INFO: US 1997-51727P 19970703; US 1998-111925

19980708; US 2001-923023 20010806

INT. PATENT CLASSIF.:

MATN: SECONDARY:

A61K038-43; C07H000-00; C07H001-00; C07H015-04 A61K009-00; A61K009-02; A61K009-14; A61K009-20; A61K009-50; A61K009-70; A61K031-7032; A61K031-7105; A61K031-711; A61K038-00; A61K039-00; A61K039-12; A61K039-39; A61K045-00; A61K047-26; C07H003-00; G02B005-22

BASIC ABSTRACT:

9901463 A UPAB: 19990310

Modified glycosides of formula (I) are new: (Y)nX (I) Y = a saccharide subunit; n = 1-6; each of the n saccharide subunits are linked in a linear or branched chain by one or more glycosidic linkages, and X = 5-6C carbon monosaccharide polyalcohol in which a hydroxy group of the polyalcohol is linked via a glycosidic bond to the anomeric carbon of one of the saccharide subunits, and at least a portion of the hydroxy groups of the glycoside is derivatised in the form of an ester, mixed ester, ether or mixed ether. Also claimed are: (1) a composition comprising (I) and a substance (II) capable of being released form the composition; (2) an optically clear device comprising (I); (3) an optically clear coating on a surface comprising plastic or metal, where the coating comprises (I); and (4) preparation of a vitreous solid delivery system comprising: (a) forming (I); and (b) processing (I) and (II) to be released form (I) to give a vitreous glass matrix having (II) incorporated in it.

USE - (I) may be used to form solid delivery systems useful for the dissolution, encapsulation, storage and delivery of a variety of therapeutic molecules. Solid delivery systems may be used for controlled release of labile molecules, particularly bioactive materials such as organic pharmaceutical compounds, enzymes, vaccines and biological control agents such as pesticides and pheromones. The delivery systems may also be used for delivering steroid hormones, peptides, peptide mimetics, antibiotics, corticosteroids, bronchodilators, immunomodulators,

immunosuppressants or substances added to laundry detergents. The optically clear nature of the compositions renders them suitable for use as a vehicle for colouring or coating a wide variety of materials such as plastics, metals and glasses. (I) also have excellent solvent properties for the dissolution of a number of poorly water soluble intense dyes.

ADVANTAGE - (I) are low cost, biodegradable, can be synthesised easily, and have good solvent properties for organic and inorganic compounds (e.g. mixed transition metal oxides and metal alkoxides). Significant intensification of colour is obtained with dye solutions containing (I) which allows minimal quantities of expensive photoactive materials to be used. Dye compositions containing (I) remain clear at ambient temperature and humidity due to their extremely slow rates of devitrification. Glasses formed using (I) have melt temperatures suitable for the incorporation of e.g. biologically active compounds without thermal degradation, and have Tgs (glass transition temperatures) above ambient temperatures. Glass melts of (I) are stable and allow suspension of core particles without alteration of their physical nature (e.g. during coating of micron-sized particles e.g. non-hygroscopic powders containing hygroscopic actives for by-inhalation administration of therapeutic agents).

Dwg.0/0

FIELD AVAILABILITY:

FILE SEGMENT: CPI

AB; DCN

MANUAL CODES:

CPI: A12-V01; B04-C02; C04-C02; B07-A02B; C07-A02B;

B10-E04C; C10-E04C; D05-A01A1; D05-A01A4; D05-C08;

D05-H10; D11-A03B; E07-A02; G02-A05

FILE 'HOME' ENTERED AT 11:23:45 ON 21 JAN 2004

=> fil reg; d stat que 184; fil capl; d que nos 187; fil uspatfull; d que nos 194 FILE 'REGISTRY' ENTERED AT 11:55:13 ON 21 JAN 2004 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2004 American Chemical Society (ACS)

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STRUCTURE FILE UPDATES: 20 JAN 2004 HIGHEST RN 639777-15-4 DICTIONARY FILE UPDATES: 20 JAN 2004 HIGHEST RN 639777-15-4

TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2003

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Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at: http://www.cas.org/ONLINE/DBSS/registryss.html

structure

CH-0 @13 14

REP G1=(1-3) 13 NODE ATTRIBUTES: DEFAULT MLEVEL IS ATOM DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES: RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 20

STEREO ATTRIBUTES: NONE L84 2949 SEA FILE=REGISTRY SSS FUL L82

100.0% PROCESSED 16530 ITERATIONS SEARCH TIME: 00.00.01

2949 ANSWERS

FILE 'CAPLUS' ENTERED AT 11:55:13 ON 21 JAN 2004 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

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FILE COVERS 1907 - 21 Jan 2004 VOL 140 ISS 4 FILE LAST UPDATED: 20 Jan 2004 (20040120/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

'OBI' IS DEFAULT SEARCH FIELD FOR 'CAPLUS' FILE

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L11 384955 SEA FILE=CAPLUS ABB=ON GLASS/OBI
L82 STR
L84 2949 SEA FILE=REGISTRY SSS FUL L82
L85 5936 SEA FILE=CAPLUS ABB=ON L84
L86 755 SEA FILE=CAPLUS ABB=ON L85(L)(DEV OR THU OR PAC OR PKT OR DMA OR BAC)/RL
L87 15 SEA FILE=CAPLUS ABB=ON L11 AND L86
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FILE 'USPATFULL' ENTERED AT 11:55:14 ON 21 JAN 2004 CA INDEXING COPYRIGHT (C) 2004 AMERICAN CHEMICAL SOCIETY (ACS)

FILE COVERS 1971 TO PATENT PUBLICATION DATE: 20 Jan 2004 (20040120/PD) FILE LAST UPDATED: 20 Jan 2004 (20040120/ED) HIGHEST GRANTED PATENT NUMBER: US6681398 HIGHEST APPLICATION PUBLICATION NUMBER: US2004010831 CA INDEXING IS CURRENT THROUGH 20 Jan 2004 (20040120/UPCA) ISSUE CLASS FIELDS (/INCL) CURRENT THROUGH: 20 Jan 2004 (20040120/PD) REVISED CLASS FIELDS (/NCL) LAST RELOADED: Oct 2003 USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Oct 2003

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USPAT2 is now available. USPATFULL contains full text of the
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     original, i.e., the earliest published granted patents or
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     applications. USPAT2 contains full text of the latest US
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     publications, starting in 2001, for the inventions covered in
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    USPATFULL. A USPATFULL record contains not only the original
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    published document but also a list of any subsequent
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    publications. The publication number, patent kind code, and
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     publication date for all the US publications for an invention
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    are displayed in the PI (Patent Information) field of USPATFULL
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    records and may be searched in standard search fields, e.g., /PN, <<<
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    /PK, etc.
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    USPATFULL and USPAT2 can be accessed and searched together
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through the new cluster USPATALL. Type FILE USPATALL to

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>>> Use USPATALL when searching terms such as patent assignees,
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>>> classifications, or claims, that may potentially change from
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>>> the earliest to the latest publication.
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This file contains CAS Registry Numbers for easy and accurate substance identification.

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=> d que nos 191
               STR
L82
          2949 SEA FILE=REGISTRY SSS FUL L82
L84
          172 SEA FILE=REGISTRY ABB=ON L84 AND USPATFULL/LC
L88
           738 SEA FILE=USPATFULL ABB=ON L88
L89
         28984 SEA FILE=USPATFULL ABB=ON GLASS/IT
L90
L91
            11 SEA FILE=USPATFULL ABB=ON L89 AND L90
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=> dup rem 187,191 FILE 'CAPLUS' ENTERED AT 12:10:17 ON 21 JAN 2004 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2004 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'USPATFULL' ENTERED AT 12:10:17 ON 21 JAN 2004 CA INDEXING COPYRIGHT (C) 2004 AMERICAN CHEMICAL SOCIETY (ACS) PROCESSING COMPLETED FOR L87 PROCESSING COMPLETED FOR L91 26 DUP REM L87 L91 (0 DUPLICATES REMOVED) L96

ANSWERS '1-15' FROM FILE CAPLUS ANSWERS '16-26' FROM FILE USPATFULL

=> d ibib abs hitstr 1-26; fil home

L96 ANSWER 1 OF 26 CAPLUS COPYRIGHT 2004 ACS on STN

2003:491015 CAPLUS ACCESSION NUMBER:

139:57936 DOCUMENT NUMBER:

TITLE:

Solid pharmaceutical for parenteral administration Hansen, Henrik Egesborg; Sabra, Mads Christian;

INVENTOR(S):

Rasmussen, Thomas Buch Novo Nordisk A/S, Den.

PATENT ASSIGNEE(S): SOURCE:

PCT Int. Appl., 51 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent English

LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

E	PATENT NO.				KI	ND	DATE			APPLICATION NO. DATE								
V	vo 2	20030	05132	28	A:	1	2003	0626		W	20	02-D	 К865		2002	1217		
		W:	ΑE,	AG,	AL,	AM,	AT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	ΒZ,	CA,	CH,	CN,
			CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,
			GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KP,	KR,	ΚZ,	LC,	LK,	LR,
			ĽS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	OM,	PH,
			PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	ТJ,	TM,	TN,	TR,	TT,	TZ,
			UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW,	AM,	ΑZ,	BY,	KG,	ΚZ,	MD,
			RU,	ТJ,	TM													
		RW:	GH,	GM,	KE,	LS,	MW,	ΜZ,	SD,	SL,	SZ,	ΤZ,	UG,	ZM,	ZW,	AT,	BE,	BG,
			CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,
			PT,	SE,	SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,

MR, NE, SN, TD, TG US 2003161881 A1 20030828 PRIORITY APPLN. INFO.:

US 2002-322143 20021218
DK 2001-1901 A 20011218
US 2001-342065P P 20011219

AB A solid pharmaceutical compn. for parenteral administration comprises an inner matrix contg. at least 1 therapeutic agent, and a biodegradable, and water-impermeable coating covering part of the surface of the compn., wherein the inner matrix disintegrates upon contact with animal tissue or tissue fluids. The coating is made from a material selected from the group consisting of polyesters such as polyglycolides, polylactides and polylactic polyglycolic acid copolymers, etc. The inner-matrix may comprise a binder, e.g., mannitol, and the active agent may comprise insulin. Dry amorphous Maltidex H16323 (35 g) was mixed with 35 g human insulin. The mixt. was cooled and investigated under a microscope and there was no air entrapment, which also is indicated by the const. torque. The insulin activity before mixing was 99.62% and after mixing 97.52%.

IT 534-46-3, Sophorose 547-25-1, Turanose 585-88-6

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (solid pharmaceutical for parenteral administration)

RN 534-46-3 CAPLUS

CN D-Glucose, 2-O-.beta.-D-glucopyranosyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 547-25-1 CAPLUS

CN D-Fructose, 3-O-.alpha.-D-glucopyranosyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 585-88-6 CAPLUS

CN D-Glucitol, 4-O-.alpha.-D-glucopyranosyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT:

THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L96 ANSWER 2 OF 26 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

2003:335248 CAPLUS

DOCUMENT NUMBER:

138:358394

TITLE:

Plasticized hydrophilic glasses for improved

stabilization of biological agents

INVENTOR(S):

Cicerone, Marcus T.; Tellington, Andrew; Trost,

Landon; Sokolov, Alexei

PATENT ASSIGNEE(S):

Brigham Young University, USA PCT Int. Appl., 45 pp.

SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PAT	ENT	NO.		KI	ND	DATE			A	PPLI	CATI	ON N	ο.	DATE							
	2003		27 27		_	2003			W	20	02-U	S283	20	2002	0906						
		AE, CO, GM, LS, PL, UA,	AG, CR, HR, LT, PT, UG,	AL, CU, HU, LU, RO, US,	AM, CZ, ID, LV, RU,	AT, DE, IL, MA, SD,	AU, DK, IN, MD, SE,	DM, IS, MG, SG,	DZ, JP, MK, SI,	EC, KE, MN, SK,	EE, KG, MW, SL,	ES, KP, MX, TJ,	FI, KR, MZ, TM,	GB, KZ, NO, TN,	GD, LC, NZ, TR,	GE, LK, OM, TT,	GH, LR, PH, TZ,				
	RW:	GH, CH, PT,	TJ, GM, CY, SE, SN,	KE, CZ, SK,	DE, TR,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,				
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PRIORITY APPLN. INFO.:

US 2001-317881P P 20010907 US 2002-199061 A 20020722

AB The stabilization of biomaterials such as proteins in a nominally dry, hydrophilic glassy matrix is vastly improved by the addn. of an appropriate amt. of a small-mol. plasticizer such as a glycol or DMSO to the formulation, while maintaining a glass transition temp. (Tg) that is above the storage temp. By plasticizing the glasses, their ability to preserve proteins is improved by as much as 100 times over the unplasticized glass at room temp. The plasticizer confers the greatest beneficial effect when it is dynamically coupled into the bulk glass, and this coupling occurs over a fairly narrow range of plasticizer concn. Methods are described in which a small-mol. plasticizer can be incorporated into a glass made of much larger mols. (e.g., a polymeric glass), with desired dynamic coupling, via a mol. that is believed to act

as a dynamic linker. Protein preservation data was obtained from two enzymes, horseradish peroxidase (HRP) and alc. dehydrogenase (ADH). For example, a bioprotective glass made of dextran, inulin, and glycerol was more effective at preserving HRP at room temp. than one made of any one or two of the components without the other(s). It is believed that inulin acts as a dynamic linker in the dextran/inulin/glycerol glass.

ΙT **585-88-6**, Maltitol

RL: MOA (Modifier or additive use); THU (Therapeutic use); BIOL

(Biological study); USES (Uses)

(plasticized hydrophilic glasses for improved stabilization of biol.

agents)

RN 585-88-6 CAPLUS

D-Glucitol, 4-O-.alpha.-D-glucopyranosyl- (9CI) (CA INDEX NAME) CN

Absolute stereochemistry.

AUTHOR(S):

L96 ANSWER 3 OF 26 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2003:60475 CAPLUS

DOCUMENT NUMBER: 139:312181

TITLE:

Investigations on the predictability of the formation of glassy solid solutions of drugs in sugar alcohols Langer, M.; Holtje, M.; Urbanetz, N. A.; Brandt, B.;

Holtje, H.-D.; Lippold, B. C.

CORPORATE SOURCE: Heinrich-Heine-Universitaet Duesseldorf, Duesseldorf,

Germany

SOURCE: International Journal of Pharmaceutics (2003),

252(1-2), 167-179

CODEN: IJPHDE; ISSN: 0378-5173

PUBLISHER: Elsevier Science B.V.

DOCUMENT TYPE: Journal

LANGUAGE: English

A prerequisite for the formation of glassy solid solns. prepd. by the melting method is the miscibility of the resp. drug and the carrier in the molten state. As could be shown exptl., all investigated drug/sugar alc. combinations miscible in the molten state form to some extent glassy solid solns., dependent on their tendency to recrystallize during prepn. Therefore, the present study focuses on the evaluation of factors that govern the miscibility of molten drugs and sugar alcs. as carriers. In this context, soly. parameters are discussed as a means of predicting miscibility in comparison to a new approach, using calcd. interaction parameters derived from mol. dynamics (MD) studies. There is evidence that a Coulomb interaction term CSR, comprising short-range electrostatic interactions and hydrogen bonding energy is essential for the miscibility of drug and carrier in the molten state. To relate CSR to the mol. vol., a non-dimensional parameter Pi is defined. For this parameter, a limiting value for miscibility exists. Contrary, calcd. soly. parameter differences between drug and sugar alc. in the range of 8-15 MPa1/2 are

not suitable for a prediction of miscibility or immiscibility, since the mixts. deviate from regular soln. behavior. In irregular mixts. of drugs and sugar alcs., an excess entropy and the formation of hydrogen bonds between unlike mols. favor miscibility, that cannot be predicted by regular soln. theory.

IT 585-88-6, Maltisorb 64519-82-0, Isomalt

81025-04-9, Lactitol monohydrate

RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(investigations on the predictability of the formation of glassy solid solns. of drugs in sugar alcs.)

RN 585-88-6 CAPLUS

CN D-Glucitol, 4-O-.alpha.-D-glucopyranosyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 64519-82-0 CAPLUS

CN D-Glucitol, 6-O-.alpha.-D-glucopyranosyl-, mixt. with 1-O-.alpha.-D-glucopyranosyl-D-mannitol (9CI) (CA INDEX NAME)

CM 1

CRN 20942-99-8 CMF C12 H24 O11

Absolute stereochemistry.

CM 2

CRN 534-73-6 CMF C12 H24 O11

Absolute stereochemistry.

RN 81025-04-9 CAPLUS

CN D-Glucitol, 4-O-.beta.-D-galactopyranosyl-, monohydrate (9CI) (CA INDEX NAME)

Absolute stereochemistry.

● H₂O

REFERENCE COUNT:

30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L96 ANSWER 4 OF 26 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

2002:657929 CAPLUS

DOCUMENT NUMBER:

137:206535

TITLE:

Composition and method for controlled release

injections

INVENTOR(S):

Roser, Bruce

PATENT ASSIGNEE(S):

Cambridge Biostability Ltd., UK; Idea, Inc.

SOURCE:

PCT Int. Appl., 23 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA'	PATENT NO.				ND	DATE			Α	PPLI	CATI	ON NO	ο.	DATE			
									_								
WO 2002066005			Α	1	2002	0829	WO 2002-US4269 20					2002	20214				
	W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	ΒZ,	CA,	CH,	CN,
		co,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FΙ,	GB,	GD,	GE,	GH,
		GM.	HR.	HU.	ID.	IL.	IN.	IS.	JP.	KE.	KG.	KP.	KR.	KZ.	LC.	LK.	LR.

LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG US 2001-784153 20010216 US 2002155129 A1 20021024 20030923 US 6623762 B2 EP 1359899 A120031112 EP 2002-720970 20020214 AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR 20010216 PRIORITY APPLN. INFO.: US 2001-784153 \ A WO 2002-US4269 W 20020214

The present invention is a pharmaceutical compn. and method for controlling the release of a drug or vaccine to a patient where a slow, controlled release of drug or antigen occurs over a considerable period of time after injection. The drug or vaccine is contained in sugar glass microspheres and then placed in an anhyd. liq., preferably perfluorocarbon, so that the vaccine is protected against dissoln. while remaining surrounded by anhyd. liq. This simple non-toxic system, deliverable by current syringe or present or future needle-free systems, is inexpensive and reliable and aids in parenteral drug delivery or mass immunization campaigns by reducing the need for repeated injections. There was a slow controlled-release of model antigen (alk. phosphatase) which had been suspended in perfluorophenanthrene.

IT 585-86-4, Lactitol 585-88-6, Maltitol

RL: MOA (Modifier or additive use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(controlled release injections contg. perfluorocarbons)

RN 585-86-4 CAPLUS

CN D-Glucitol, 4-O-.beta.-D-galactopyranosyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 585-88-6 CAPLUS

CN D-Glucitol, 4-O-.alpha.-D-glucopyranosyl- (9CI) (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L96 ANSWER 5 OF 26 CAPLUS COPYRIGHT 2004 ACS on STN

3

ACCESSION NUMBER:

2002:493350 CAPLUS

DOCUMENT NUMBER:

138:243016

TITLE:

Contribution of Temperature Modulated DSC to the Study

of the Molecular Mobility in Glass Forming

Pharmaceutical Systems

AUTHOR(S):

Carpentier, L.; Bourgeois, L.; Descamps, M.

CORPORATE SOURCE:

Laboratoire de Dynamique et Structure des Materiaux

Moleculaire, U.P.R.E.S.A. CNRS 8024, Villeneuve

d'Ascq, 59655, Fr.

SOURCE:

Journal of Thermal Analysis and Calorimetry (2002),

68(2), 727-739

CODEN: JTACF7; ISSN: 1418-2874 Kluwer Academic Publishers

PUBLISHER:

DOCUMENT TYPE: Journal

LANGUAGE:

English

The temp. modulated differential scanning calorimetry (MDSC) technique has been used to characterize the low frequency mol. mobility of indomethacin and maltitol just above their resp. calorimetric glass transition temp. Tg. Anal. has been made using the concept of complex sp. heat. Spectroscopic information are thus obtained through the temp. dependence of the isochronal real and imaginary parts C' and C''. This gives access to the fragility index m and the stretched exponent .beta.. The comparison with dielec. spectroscopy has been performed to check the coherence of spectroscopic information. Measurements on maltitol enable to demonstrate the useful complementarity of the technique when the low frequencies dielec. relaxations are occulted by the presence of conductors default.

585-88-6, Maltitol IT

RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological

study); USES (Uses)

(mol. mobility of indomethacin and maltitol using temp. modulated DSC)

RN 585-88-6 CAPLUS

D-Glucitol, 4-O-.alpha.-D-glucopyranosyl- (9CI) (CA INDEX NAME) CN

REFERENCE COUNT:

31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L96 ANSWER 6 OF 26 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2002:149901 CAPLUS

DOCUMENT NUMBER: 137:341986

TITLE: Direct compression properties of melt-extruded isomalt

AUTHOR(S): Ndindayino, F.; Henrist, D.; Kiekens, F.; Van den

Mooter, G.; Vervaet, C.; Remon, J. P.

CORPORATE SOURCE: Faculty of Pharmaceutical Sciences, Laboratory of

Pharmaceutical Technology, Ghent University, Ghent,

9000, Belg.

SOURCE: International Journal of Pharmaceutics (2002),

235(1-2), 149-157

CODEN: IJPHDE; ISSN: 0378-5173

PUBLISHER: Elsevier Science B.V.

DOCUMENT TYPE: Journal LANGUAGE: English

AB Isomalt, a sugar alc., was melt-extruded prior to compression in order to improve its tabletting properties. After fusion, cryst. isomalt was transformed into an amorphous form as shown by x-ray diffraction and DSC. The tabletting properties of amorphous isomalt were dramatically improved. Mixts. formulated with paracetamol (50%) and extruded isomalt yielded hard tablets. However, extruded isomalt powder showed agglomeration problems due to recrystn. of the amorphous phase into a stable cryst. form in the presence of atm. moisture. The evolution of the moisture content correlated well with the compressibility data. The tablets made of extruded isomalt powder had a lower friability in comparison to the tablets formulated with non-extruded isomalt powder. Their disintegration was fast and a rapid dissoln. rate was recorded. Extruded isomalt displayed excellent tabletting properties; however, further expts. should be conducted to delay or even prevent recrystn. of amorphous isomalt.

IT **64519-82-0**, Palatinit C

RL: PEP (Physical, engineering or chemical process); PRP (Properties); PYP (Physical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)

(direct compression properties of melt-extruded isomalt)

RN 64519-82-0 CAPLUS

D-Glucitol, 6-O-.alpha.-D-glucopyranosyl-, mixt. with 1-O-.alpha.-D-glucopyranosyl-D-mannitol (9CI) (CA INDEX NAME)

CM 1

CN

CRN 20942-99-8 CMF C12 H24 O11

CM 2

CRN 534-73-6 CMF C12 H24 O11

Absolute stereochemistry.

REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L96 ANSWER 7 OF 26 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2001:489262 CAPLUS

DOCUMENT NUMBER: 135:82018

TITLE: Particulate vitamin composition comprising an oil of a

vitamin

INVENTOR(S): Chiavazza, Veronique; Statiotis, Eraclis

PATENT ASSIGNEE(S): Aventis Animal Nutrition S.A., Fr.

SOURCE: PCT Int. Appl., 20 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PAT	ENT	NO.		KI	ND	DATE			A	PPLI	CATI	ON N	ο.	DATE			
		0475		A:	_	2001			W	0 20	00-E	P133	85	2000	1219		
		AE, CR, HU, LU,	AG, CU, ID, LV,	AL, CZ, IL, MA,	AM, DE, IN, MD,		AU, DM, JP, MK,	DZ, KE, MN,	EE, KG, MW,	ES, KP, MX,	FI, KR, MZ,	GB, KZ, NO,	GD, LC, NZ,	GE, LK, PL,	GH, LR, PT,	GM, LS, RO,	HR, LT, RU,

YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG EP 1244472 20021002 EP 2000-988814 20001219 A2 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR JP 2003518509 20030610 JP 2001-548148 T2 20001219 20030410 US 2002-168317 US 2003068407 Α1 20020620 EP 1999-125694 PRIORITY APPLN. INFO.: 19991223 Α WO 2000-EP13385 W 20001219

AB A particulate compn. comprising (a) an oil of a vitamin, an oil contg. one or more vitamin or a deriv., (b) a gelling agent of vegetable origin, having a glass transition point greater than 20 .degree.C, and (c) a protein, except gelatine. A particulate vitamin emulsion contained carrageenan 2.69, calcium carbonate 9.62, casein 1.92, water 80.77, vitamin A 4.04, and Bu hydroxytoluene 0.96%.

IT **585-88-6**, maltitol

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (particulate vitamin compn. comprising oil of vitamin)

RN 585-88-6 CAPLUS

CN D-Glucitol, 4-O-.alpha.-D-glucopyranosyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L96 ANSWER 8 OF 26 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

2001:129878 CAPLUS

DOCUMENT NUMBER:

134:183489

TITLE:

Composition for stable injectable liquids containing

perfluorocarbons

INVENTOR(S):

Roser, Bruce Joseph; Garcia De Castro, Arcadio; Maki,

James

PATENT ASSIGNEE(S):

Ronai, Peter M., USA

SOURCE:

U.S., 9 pp. CODEN: USXXAM

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	US 6190701	B1	20010220	US 1999-271204	19990317
PRIC	RITY APPLN. INFO.	:		US 1999-271204	19990317
AB	A compn. for del	iverin	g a stable,	bioactive compd. to	a subject compr

AB A compn. for delivering a stable, bioactive compd. to a subject comprising a first component and a second component, the first component comprises microparticles of sugar glass or a phosphate glass contg. the bioactive agent. The sugar glass or phosphate glass optionally includes a glass formation facilitator compd. The second component comprises at least one biocompatible liq. perfluorocarbon in which the first component is insol. and dispersed. The liq. perfluorocarbon optionally includes a surfactant. For example, alk. phosphatase was stabilized in a glass based on mannitol 33.3%, calcium phosphate 33.3% and degraded gelatin 33.3%, spray dried as microspheres and stored at 55.degree. either as the dry powder or as a suspension in perfluorodecalin. The enzyme microspheres suspended in perfluorodecalin show retention of close to 100% of enzyme activity for > 30 days at 55.degree.

IT 585-86-4, Lactitol 64519-82-0, Palatinit

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (injectable compns. contg. drugs, enzymes, and vaccines stabilized in sugar or phosphate glasses and liq. perfluorocarbons)

RN 585-86-4 CAPLUS

CN D-Glucitol, 4-O-.beta.-D-galactopyranosyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 64519-82-0 CAPLUS

CN D-Glucitol, 6-O-.alpha.-D-glucopyranosyl-, mixt. with 1-O-.alpha.-D-glucopyranosyl-D-mannitol (9CI) (CA INDEX NAME)

CM 1

CRN 20942-99-8 CMF C12 H24 O11

Absolute stereochemistry.

CM 2

CRN 534-73-6 CMF C12 H24 O11 Absolute stereochemistry.

REFERENCE COUNT:

17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L96 ANSWER 9 OF 26 CAPLUS COPYRIGHT 2004 ACS on STN >

ACCESSION NUMBER:

2000:756507 CAPLUS

DOCUMENT NUMBER:

133:325636

TITLE:

Dry, moldable drug formulation

INVENTOR(S):

Buch-Rasmussen, Thomas; Aasmul, Soren; Poulsen,

Jens-Ulrik; Flink, James M.; Hansen, Philip;

Juul-Mortensen, Claus

PATENT ASSIGNEE(S):

Novo Nordisk A/S, Den. PCT Int. Appl., 40 pp.

SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

	PATENT NO.			KI	ND 	DATE			A	PPLI	CATI	и ис	o. 	DATE				
	WO	2000	0627	59	A	1	2000	1026		W	0 20	00-Di	K184		2000	0413		
		W:	ΑE,	AG,	AL,	AM,	AT,	ΑU,	AZ,	BA,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CR,
			CU,	CZ,	DE,	DK,	DM,	DZ,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	GM,	HR,	HU,
			ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KP,	KR,	ΚZ,	LC,	LK,	LR,	LS,	LT,	LU,
			LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	NO,	NZ,	PL,	PT,	RO,	RU,	SD,	SE,
			SG,	SI,	SK,	SL,	ТJ,	TM,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VN,	YU,	ZA,
			ZW,	AM,	ΑZ,	BY,	KG,	ΚZ,	MD,	RU,	ТJ,	TM		•				
		RW:	GH,	GM,	ΚE,	LS,	MW,	SD,	SL,	SZ,	TZ,	UG,	ZW,	AT,	BE,	CH,	CY,	DE,
			DK,	ES,	ΓI,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	ΝL,	PT,	SE,	BF,	ВJ,	CF,
			CG,	CI,	CM,	GA,	GN,	GW,	ML,	MR,	ΝE,	SN,	TD,	ТĢ				
	ΕP	1173	151		Α	1	2002	0123		E	P 20	00-9	1871	9	2000	0413		
	ΕP	1173	151		В	1	2003	0709										
		R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,
			ΙE,	SI,	LT,	LV,	FI,	RO										
	JP	2002								J	P 20	00-6	1189	6	2000	0413		
	ΑT	2445	58		Ε		2003	0715		A	T 20	00-9	1871	9	2000	0413		
PRIO	RIT:	APP	LN.	INFO	. :					DK 1	999-	514		A	1999	0416		
															2000			
AB	The	e pre	sent	inv	enti	on r	elate	es to	o a	soli	d ph	arma	ceut:	ical	comp	on.	for	

Present invention relates to a solid pharmaceutical compn. For parenteral injection comprising a binder and at least one therapeutic agent, said binder constituting at least 0.5 % by wt. of the compn. and said binder comprising at least one binding agent being a carbohydrate, and optionally at least one non-crystn. agent, whereby said binder forms an amorphous matrix, and the amt. of said therapeutic agent consisting of at least one dosage. The pharmaceutical compn. has the strength to be injected directly with the need of using cannulas or the like. The

therapeutic agent may be any pharmaceutical suitable for injection, such as s.c. or i.m. injection. A compn. comprising 100% C*Maltidex H16323 (88% maltitol) was prepd.

IT 534-46-3, Sophorose 547-25-1, Turanose 585-88-6, Maltitol

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (dry, moldable drug formulation)

RN 534-46-3 CAPLUS

CN D-Glucose, 2-O-.beta.-D-glucopyranosyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 547-25-1 CAPLUS

CN D-Fructose, 3-O-.alpha.-D-glucopyranosyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 585-88-6 CAPLUS

CN D-Glucitol, 4-O-.alpha.-D-glucopyranosyl- (9CI) (CA INDEX NAME)

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L96 ANSWER 10 OF 26 CAPLUS COPYRIGHT 2004 ACS on STN

1999:613714 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 131:248244

Amorphous glasses for stabilizing sensitive products TITLE:

Roser, Bruce Joseph; De Castro, Arcadio Garcia INVENTOR(S):

PATENT ASSIGNEE(S): Cambridge Biostability Limited, UK

SOURCE: PCT Int. Appl., 26 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

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PATENT NO.
                    KIND DATE
                                        APPLICATION NO. DATE
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                                       -----
                         _____
                                       WO 1999-GB820 19990317
                    A1
                          19990923
    WO 9947174
        W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ,
            DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS,
            JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK,
            MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ,
            TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ,
            MD, RU, TJ, TM
        RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK,
            ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG,
            CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                                   AU 1999-29451
    AU 9929451
                    A1
                          19991011
                                                         19990317
    EP 1071465
                     A1
                                       EP 1999-910516 19990317
                          20010131
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, FI
PRIORITY APPLN. INFO.:
                                      GB 1998-5699
                                                     A 19980318
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GB 1998-20689 A 19980923 W 19990317 WO 1999-GB820

A method of drying, without damage, a compd. which is subject to AΒ deactivation on drying, or a mixt. of such compds., comprises subjecting an aq. system contg. the compd. or mixt. to drying in the presence of .gtoreq.1 chem. inert monosaccharide sugar alc. and .gtoreq.1 additive which is a glass-former or a glass formation facilitator, whereby the compd. solidifies from soln. as an amorphous glass rather than by forming crystals. This method is useful for drying compds. at or above room temp. which are otherwise subject to deactivation on drying. Thus, alk. phosphatase, vacuum-dried or freeze-dried in a glass-forming blend of mannitol 30, inositol 15, galactitol 15, and Byco C (degraded gelatin) 40%, was stable during storage at 37.degree. or 50.degree. for 5 wk.

IT **64519-82-0**, Palatinit

> RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (crystn. inhibitor; amorphous glasses for stabilizing sensitive products)

RN 64519-82-0 CAPLUS

D-Glucitol, 6-O-.alpha.-D-glucopyranosyl-, mixt. with 1-O-.alpha.-D-CN glucopyranosyl-D-mannitol (9CI) (CA INDEX NAME)

CM 1

CRN 20942-99-8 CMF C12 H24 O11

CM 2

CRN 534-73-6 CMF C12 H24 O11

Absolute stereochemistry.

REFERENCE COUNT:

THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L96 ANSWER 11 OF 26 CAPLUS COPYRIGHT 2004 ACS on STN

7

ACCESSION NUMBER: 1999:405173 CAPLUS

DOCUMENT NUMBER:

131:43592

TITLE:

.beta.(1-3)-Glucan diagnostic assays

INVENTOR(S):

Wakshull, Eric M.; Mackin, William M.; Zimmerman,

Janet W.; Fisette, Leslie W.

PATENT ASSIGNEE(S):

Alpha-Beta Technology, Inc., USA

SOURCE:

PCT Int. Appl., 56 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

6

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA'	PATENT NO. KIND				ND	DATE APPLICATION NO. DATE												
WO 9931510				A	1	19990624			W	0 19	98-U	S240	 14	1998	1112			
	W:	ΑL,	AM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CU,	CZ,	DE,	
						GB,												
						LC,												
						PT,												
																	ТJ,	MT
	RW:	GH,																

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FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI,
             CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     US 6084092
                            20000704
                                           US 1997-990125
                       Α
                                                             19971212
     CA 2314342
                            19990624
                                           CA 1998-2314342
                       AΑ
                                                             19981112
                            19990705
     AU 9913967
                       A1
                                           AU 1999-13967
                                                             19981112
                            20011101
     AU 740158
                       B2
                            20000927
                                           EP 1998-957794
     EP 1038180
                       A1
                                                             19981112
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, FI
                            20020319
                                           JP 2000-539356
     JP 2002508518
                       Т2
                                                             19981112
                                        US 1997-990125
PRIORITY APPLN. INFO.:
                                                          A 19971212
                                        US 1997-797696
                                                          A2 19970131
                                        WO 1997-US7445
                                                          A2 19970501
                                        WO 1998-US24014 W 19981112
AΒ
    Methods of isolating .beta.(1-3)-glucan or .beta.(1-3)-glucan-contg.
     organisms in a sample, or of detecting the presence of .beta.(1-3)-glucan
     or .beta.(1-3)-glucan-contg. organisms in a sample, utilizing binding
     agents for .beta.(1-3)-glucan, such as LacCer, GalCer,
     globotriaosylceramide and asialoganglioside-GM1, are described. Methods
     of diagnosing fungal infection, by detecting .beta.(1-3)-glucan or
     .beta.(1-3)-glucan-contg. organisms, are also described. Antibodies and
     kits useful in the methods are also disclosed.
     3256-04-0, Laminaritriose 26212-72-6, Laminaritetraose
IT
     RL: ARU (Analytical role, unclassified); THU (Therapeutic use);
     ANST (Analytical study); BIOL (Biological study); USES (Uses)
        (.beta.(1.fwdarw.3)-glucan diagnostic assays using .beta.(1.fwdarw.3)-
        glucan binding agent and labeled antibody)
RN
     3256-04-0 CAPLUS
CN
     D-Glucose, O-.beta.-D-glucopyranosyl-(1.fwdarw.3)-O-.beta.-D-
     glucopyranosyl-(1.fwdarw.3)- (9CI) (CA INDEX NAME)
```

Absolute stereochemistry.

RN 26212-72-6 CAPLUS

CN D-Glucose, O-.beta.-D-glucopyranosyl-(1.fwdarw.3)-O-.beta.-D-glucopyranosyl-(1.fwdarw.3)-O-.beta.-D-glucopyranosyl-(1.fwdarw.3)- (9CI) (CA INDEX NAME)

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L96 ANSWER 12 OF 26 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1999:48730 CAPLUS

DOCUMENT NUMBER: 130:129975

TITLE: Modified glycosides and compositions comprised thereof

for medical and other uses

INVENTOR(S): Colaco, Camilo

PATENT ASSIGNEE(S): Quadrant Holdings Cambridge Limited, UK

SOURCE: PCT Int. Appl., 39 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PAT	PATENT NO.		KI	ND	D DATE .			A	PPLI	CATI	ON NC	o.	DATE					
					A3 19990325		WO 1998-GB1962 BB, BG, BR, BY, CA, CH			2	19980703							
		DK, KG, MX, TT, GH, FI,	EE, KP, NO, UA, GM, FR,	ES, KR, NZ, UG, KE, GB,	FI, KZ, PL, US, LS, GR,	AZ, GB, LC, PT, UZ, MW, IE, MR,	GE, LK, RO, VN, SD, IT,	GH, LR, RU, YU, SZ, LU,	GM, LS, SD, ZW, UG, MC,	GW, LT, SE, AM, ZW, NL,	HR, LU, SG, AZ, AT,	HU, LV, SI, BY, BE,	ID, MD, SK, KG, CH,	IL, MG, SL, KZ, CY,	IS, MK, TJ, MD, DE,	JP, MN, TM, RU, DK,	KE, MW, TR, TJ, ES,	TM
	9948	87 [.]	•	A	2 .	2000	0426	,	•		98-93	3236:	1	1998	0703			
EP	9948 R:		BE,			2002 DK,		FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,	
AT	2002 2285 2187	5103: 28	16	Ε		2002 2002 2003	1215		A	Г 19		3236	1	1998 1998 1998	0703			
	2002	0094	64	A	1	2002	0124		U: US 1 WO 1	S 20 997- 998-	01-9: 5172 GB19	2302: 7P 62	3 P W	2001 1997 1998 1998	0806 0703 0703			

AB Modified glycosides YnX (Y = saccharide subunit; X = C5-6 sugar alc.; n = 1-6; part or all of the OH groups in X and Y are derivatized as esters or ethers) are provided which can be used to form a variety of materials including biodegradable solid delivery systems and optically clear colored devices or coatings. The solid delivery systems can be used for delivery and release of a variety of substances including lipids, proteins, peptides, peptidomimetics, hormones, saccharides, nucleic acids, and

nucleoproteins, as well as viruses, bacteria, antigens, and haptens coupled to carriers; they can be in the form of tablets for oral administration, or in the form of powders, microspheres or implants for i.v., intradermal, transdermal, pulmonary, or other route of administration. The modified glycosides may be processed to form a vitreous glass matrix having a substance, such as a therapeutic agent, or an optically active dye incorporated therein. The vitreous glass matrix may be provided in a solid dosage form which is capable of releasing a therapeutic substance in situ at various controlled rates. Alternatively, a melt or soln. contg. modified glycosides and a dye can be used to produce optically clear colored coatings, plastic articles, and synthetic fibers. Thus, nonaacetylated derivs. of lactitol, palatinit, .alpha.-D-glucopyranosyl-(1.fwdarw.6)-sorbitol, and .alpha.-Dglucopyranosyl-(1.fwdarw.6)-mannitol with a range of m.p. values and glass transition temps. were produced by reaction of the polyols with Ac20. Glasses produced by quenching melts of the acetylated polyols were good solvents for poorly water-sol. solutes such as Disperse Red 1; the solutes had little effect on the glass transition temp. and did not cause devitrification. Lactitol nonaacetate glasses contg. cyclosporin A and diltiazem-HCl showed different profiles of controlled release on immersion in saline soln.; the release rates were altered by addn. of Tween 20 to

IT 37091-07-9P, Lactitol nonaacetate 41897-24-9P, Maltitol
nonaacetate 41897-25-0P 219827-68-6P
219827-69-7P

RL: DEV (Device component use); SPN (Synthetic preparation);
THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(modified glycosides and compns. comprised thereof for medical and other uses)

RN 37091-07-9 CAPLUS

CN D-Glucitol, 4-O-(2,3,4,6-tetra-O-acetyl-.beta.-D-galactopyranosyl)-, pentaacetate (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 41897-24-9 CAPLUS

CN D-Glucitol, 4-O-(2,3,4,6-tetra-O-acetyl-.alpha.-D-glucopyranosyl)-, pentaacetate (9CI) (CA INDEX NAME)

RN 41897-25-0 CAPLUS

CN D-Glucitol, 6-O-(2,3,4,6-tetra-O-acetyl-.alpha.-D-glucopyranosyl)-, pentaacetate (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 219827-68-6 CAPLUS

CN D-Mannitol, 1-O-(2,3,4,6-tetra-O-acetyl-.alpha.-D-glucopyranosyl)-, pentaacetate (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 219827-69-7 CAPLUS

CN D-Glucitol, 6-O-(2,3,4,6-tetra-O-acetyl-.alpha.-D-glucopyranosyl)-, pentaacetate, mixt. with 1-O-(2,3,4,6-tetra-O-acetyl-.alpha.-D-glucopyranosyl)[D-mannitol] pentaacetate (9CI) (CA INDEX NAME)

CM 1

CRN 219827-68-6 CMF C30 H42 O20

Absolute stereochemistry.

CM 2

CRN 41897-25-0 CMF C30 H42 O20

Absolute stereochemistry.

L96 ANSWER 13 OF 26 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

1998:635637 CAPLUS

DOCUMENT NUMBER:

129:265476

TITLE:

Stable particle in liquid formulations comprising

sugar **glass**

INVENTOR(S):

Roser, Bruce Joseph; Sen, Shevanti Devika

PATENT ASSIGNEE(S): SOURCE:

Eastbridge Ltd., UK

PCT Int. Appl., 40 pp.

CODEN: PIXXD2

DOCUMENT TYPE: LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

WO 9841188 A2 19980924 WO 1998-GB817 19980318
WO 9841188 A3 19981210

W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG,

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KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX,
             NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT,
             UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI,
             FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM,
             GA, GN, ML, MR, NE, SN, TD, TG
    AU 9865101
                       A1
                            19981012
                                            AU 1998-65101
                                                             19980318
    AU 722627
                       B2
                            20000810
    EP 1007000
                       A2
                            20000614
                                            EP 1998-910875
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, FI
    BR 9808920
                            20000801
                                            BR 1998-8920
                                                             19980318
    NZ 337666
                            20010427
                                            NZ 1998-337666
                                                             19980318
     JP 2002504090
                       T2
                            20020205
                                            JP 1998-540262
                                                             19980318
    NO 9904508
                       Α
                            19991117
                                            NO 1999-4508
                                                             19990917
    US 6669963
                            20031230
                       В1
                                            US 1999-380485
                                                             19991104
PRIORITY APPLN. INFO.:
                                         GB 1997-5588
                                                          Α
                                                             19970318
                                         WO 1998-GB817
                                                            19980318
                                                          W
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AB A stable particle in liq. formulation comprising a discontinuous phase of microparticles is suspended in a continuous phase which is a non-aq. liq., preferably biocompatible in which the microparticles are insol. microparticles comprise finely powd. sugar glass selected from the group consisting of trehalose, palatinit, glucopyranosyl sorbitol, glucopyranosyl mannitol, lactitol and monosaccharide alcs. such as mannitol and inositol, holding at least one biomol. product, the biomol. product in the sugar glass either being in stable solid soln. or being itself in suspension in the sugar glass. A monodisperse single-particle suspension of microparticles can be produced in the non-aq. continuous liq. phase by inclusion in the continuous phase of at least one surfactant having a low or very low HLB. A soln. contg. trehalose 0.6, sodium sulfate 0.35 M, bovine serum albumin 0.75, zinc chloride 1, magnesium chloride 1 mM, and alk. phosphatase 40 units/mL was spray dried. When the powder was stored at 37.degree., there was no loss of enzyme activity over 84 days of storage.

IT 534-73-6 585-86-4, Lactitol 20942-99-8 64519-82-0, Palatinit

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (stable particle in liq. formulations comprising sugar glass)

RN 534-73-6 CAPLUS

CN D-Glucitol, 6-0-.alpha.-D-glucopyranosyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 585-86-4 CAPLUS

CN D-Glucitol, 4-O-.beta.-D-galactopyranosyl- (9CI) (CA INDEX NAME)

RN 20942-99-8 CAPLUS

CN D-Mannitol, 1-O-.alpha.-D-glucopyranosyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 64519-82-0 CAPLUS

CN D-Glucitol, 6-O-.alpha.-D-glucopyranosyl-, mixt. with 1-O-.alpha.-D-glucopyranosyl-D-mannitol (9CI) (CA INDEX NAME)

CM 1

CRN 20942-99-8 CMF C12 H24 O11

Absolute stereochemistry.

CM 2

CRN 534-73-6

CMF C12 H24 O11

Absolute stereochemistry.

L96 ANSWER 14 OF 26 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

1997:132798 CAPLUS

DOCUMENT NUMBER:

126:148555

TITLE:

Methods for stably incorporating substances within

dry, foamed glass matrixes and compositions

obtained thereby

INVENTOR(S):

Roser, Bruce Joseph; Gribbon, Enda Martin

PATENT ASSIGNEE(S):

Quadrant Holdings Cambridge Limited, UK; Roser, Bruce

Joseph; Gribbon, Enda Martin

SOURCE:

PCT Int. Appl., 43 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

1

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PAT	CENT N	0.		KI	ND	DATE			A	PPLI	CATI	ои ис	ο.	DATE			
	96400 96400								W	0 19	96-GI	B136	7	1996	0607		
		ES,	FI, LU,	GB,	GE,	HU,	IL,	IS,	JP,	ΚE,	KG,	ΚP,	KR,	CZ, KZ, PT,	LK,	LR,	LS,
	RW:													FI, CM,		GB,	GR,
CA	22234	38		A	A	1996:	1219		C.	A 19	96-22	2234	38	19960	0607		
AU	96600	98		A.	1	1996	1230		A	U 19	96-60	0098		19960	0607		
	71359																
EP	83179	0		A.	2	1998	0401		Ε	P 19	96-93	1756	9	19960	0607		
EP	83179	0		B	1	2003	0507										
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,
		ΙE,	•	•	-		•	•	•	·	•	•					
CN	11939	08	-	A	-	1998	0923		C	N 19	96-1	9461	7	19960	0607		
BR	96091	88		Α		1999	0511		В	R 19	96-9	188		1996	0607		
JP	96091 11506	467		T	2	1999	0608		J	P 19	97-5	0023	5	1996	0607		
	12248													1996			
	852					2000	0616		Α	P 19	97-1	151		1996	0607		
						SZ,											
\mathtt{PL}	18482 23945	3		B	1	2002	1231		P	L 19	96-3	2390:	2	1996	0607		
AT	23945	1		E		2003	0515		Α	Т 19	96-9	1756	9	1996	0607		
PT	83179	0		\mathbf{T}		2003	0731		P	Т 19	96-9	6917	569	1996	0607		
NO	97057	73		Α		1998	0203		N					1997			
	APPL									995-	4860	43	Α	1995	0607		

WO 1996-GB1367 W 19960607

AB The invention provides methods for producing foamed glass matrixes and compns. The compns. are suitable for stable storage of a wide variety of substances, particularly biol. substances and pharmaceuticals. The effect of additives, e.g., Na metabisulfite, on foamed glass matrixes formation were detd. Rapid dissoln. of the foamed glass matrixes was obsd. on reconstitution.

IT 585-86-4, Lactitol 585-88-6, Maltitol 64519-82-0

, Palatinit

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (storage stability of pharmaceuticals.in foamed glass matrixes)

RN 585-86-4 CAPLUS

CN D-Glucitol, 4-0-.beta.-D-galactopyranosyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 585-88-6 CAPLUS

CN D-Glucitol, 4-O-.alpha.-D-glucopyranosyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 64519-82-0 CAPLUS

CN D-Glucitol, 6-O-.alpha.-D-glucopyranosyl-, mixt. with 1-O-.alpha.-D-glucopyranosyl-D-mannitol (9CI) (CA INDEX NAME)

CM 1

CRN 20942-99-8

CMF C12 H24 O11

CM 2

CRN 534-73-6 CMF C12 H24 O11

Absolute stereochemistry.

L96 ANSWER 15 OF 26 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1997:101558 CAPLUS

DOCUMENT NUMBER: 126:101463

TITLE: Cell culture material modified with carbohydrate INVENTOR(S): Yura, Hirofumi; Goto, Mitsuaki; Kobayashi, Kazukyo;

Akaike, Toshihiro

PATENT ASSIGNEE(S): Kanagawa Kagaku Gijutsu Akadem, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 15 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 08317786	A2	19961203	JP 1996-87195	19960315
JP 3177610	B2	20010618		

PRIORITY APPLN. INFO.:

JP 1995-86527 A 19950317

AB The surface of cell culture container, flask, plate, film, etc. is modified with carbohydrate polymer to regulate the morphol. change, proliferation, etc. of cultured cells. The cell culture device is based on e.g. polystyrene and is modified with carbohydrate selected from poly-[N-p-vinylbenzyl-[O-.alpha.-D-glucopyranosyl-(1.fwdarw.4)-D-glucosamide]], poly-[N-p-vinylbenzyl-[O-.beta.-D-galactopyranosyl-

(1.fwdarw.4)-D-gluconamide]],.

ΙT 185826-24-8

> RL: BUU (Biological use, unclassified); DEV (Device component use) ; MOA (Modifier or additive use); BIOL (Biological study); USES (Uses) (cell culture material modified with carbohydrate)

RN 185826-24-8 CAPLUS

CN D-Gluconamide, N-[(4-ethenylphenyl)methyl]-3-0-.beta.-D-glucopyranosyl-(CA INDEX NAME)

Absolute stereochemistry.

ANSWER 16 OF 26 USPATFULL on STN

ACCESSION NUMBER:

2003:231683 USPATFULL

TITLE:

Solid dose micro implant

INVENTOR(S):

Hansen, Henrik Egesborg, Hellerup, DENMARK Buch-Rasmussen, Thomas, Gentofte, DENMARK Sabra, Mads Christian, Kobenhavn, DENMARK

		NUMBER	KIND	DATE	•
PATENT INFORMATION:	US	2003161881	A1	20030828	
APPLICATION INFO.:	US	2002-322143	A1	20021218	(10)

DATE NUMBER PRIORITY INFORMATION: DK 2001-1901 20011218 US 2001-342065P 20011219 (60)

DOCUMENT TYPE: Utility FILE SEGMENT:

APPLICATION

LEGAL REPRESENTATIVE:

Reza Green, Esq., Novo Nordisk Pharmaceuticals, Inc.,

100 College Road West, Princeton, NJ, 08540

NUMBER OF CLAIMS: 95 EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS:

3 Drawing Page(s)

LINE COUNT:

1427

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

A solid pharmaceutical composition for parenteral administration having an inner matrix containing at least one therapeutic agent, and a biodegradable, and water-impermeable coating covering part of the surface of said composition. The inner matrix disintegrates upon contact with animal tissue or tissue fluids. By providing a disintegratable and/or soluble inner matrix comprising the drug with a water-impermeable coating covering part of the surface of said composition, the rate of release of the drug can be controlled. The specific rate of release can be controlled by carefully designing the part of the surface which is not covered.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 534-46-3, Sophorose 547-25-1, Turanose 585-88-6

, Maltitol

(solid pharmaceutical for parenteral administration)

RN 534-46-3 USPATFULL

CN D-Glucose, 2-O-.beta.-D-glucopyranosyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 547-25-1 USPATFULL

CN D-Fructose, 3-O-.alpha.-D-glucopyranosyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 585-88-6 USPATFULL

CN D-Glucitol, 4-O-.alpha.-D-glucopyranosyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L96 ANSWER 17 OF 26 USPATFULL on STN

ACCESSION NUMBER:

2003:99302 USPATFULL

TITLE:

Particulate vitamin composition

INVENTOR(S):

Chiavazza, Veronique, Caluire, FRANCE

Statiotis, Eraclis, Villette d'Anthon, FRANCE

	NUMBER	KIND	DATE	
US	2003068407	A1	20030410	
US	2002-168317	A1	20020620	(10)
WO	2000-EP13385		20001219	
	US	NUMBER 	US 2003068407 A1 US 2002-168317 A1	US 2003068407 A1 20030410 US 2002-168317 A1 20020620

NUMBER DATE

PRIORITY INFORMATION:

EP 1999-125694 19991223

DOCUMENT TYPE:

Utility

APPLICATION

FILE SEGMENT: LEGAL REPRESENTATIVE:

FINNEGAN, HENDERSON, FARABOW, GARRETT &, DUNNER LLP,

1300 I STREET, NW, WASHINGTON, DC, 20006

NUMBER OF CLAIMS: EXEMPLARY CLAIM:

LINE COUNT: 610

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

A particulate composition comprising (a) an oil of a vitamin, an oil containing one or more vitamin or a derivative, (b) a gelling agent of vegetable origin, having a glass transition point greater than

20.degree. C., and (c) a protein, except gelatine.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

585-88-6, maltitol

(particulate vitamin compn. comprising oil of vitamin)

RN 585-88-6 USPATFULL

CN D-Glucitol, 4-O-.alpha.-D-glucopyranosyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L96 ANSWER 18 OF 26 USPATFULL on STN

ACCESSION NUMBER:

2003:337150 USPATFULL

TITLE:

INVENTOR(S):

Stable particle in liquid formulations Kampinga, Jaap, Groningen, NETHERLANDS

PATENT ASSIGNEE(S):

Elan Drug Delivery Limited, Nottingham, UNITED KINGDOM

(non-U.S. corporation)

NUMBER	KIND	DATE	
US 6669963	B1	20031230	
WO 9841188		19980924	
US 1999-380485		19991104	(9)
WO 1998-GB817		19980318	
1	NUMBER US 6669963 WO 9841188 US 1999-380485 WO 1998-GB817	US 6669963 B1 WO 9841188 US 1999-380485	US 6669963 B1 20031230 WO 9841188 19980924 US 1999-380485 19991104

DOCUMENT TYPE: Utility FILE SEGMENT: GRANTED

PRIMARY EXAMINER: Low, Christopher S. F.

ASSISTANT EXAMINER: Lukton, David

LEGAL REPRESENTATIVE: Morrison & Foerster LLP

NUMBER OF CLAIMS: 30 EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 8 Drawing Figure(s); 8 Drawing Page(s)

LINE COUNT: 728

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

As a stable particle in liquid formulation comprising a discontinuous phase of microparticles is suspended in a continuous phase which is a non-aqueous liquid, preferably biocompatible in which the microparticles are insoluble. The microparticles comprise finely powdered sugar glass, such as trehalose, palatnit, glucopyranosyl sorbitol, glucopyranosyl mannitol, lactitol and monosaccharide alcohols, such as mannitol and inositol, holding at least one biomolecular product, the biomolecular product in the sugar glass either being in stable solid solution or being itself in suspension in the sugar glass.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 534-73-6 585-86-4, Lactitol 20942-99-8

64519-82-0, Palatinit

(stable particle in liq. formulations comprising sugar glass)

RN 534-73-6 USPATFULL

CN D-Glucitol, 6-O-.alpha.-D-glucopyranosyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 585-86-4 USPATFULL

CN D-Glucitol, 4-O-.beta.-D-galactopyranosyl- (9CI) (CA INDEX NAME)

RN 20942-99-8 USPATFULL

CN D-Mannitol, 1-O-.alpha.-D-glucopyranosyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 64519-82-0 USPATFULL

CN D-Glucitol, 6-O-.alpha.-D-glucopyranosyl-, mixt. with 1-O-.alpha.-D-glucopyranosyl-D-mannitol (9CI) (CA INDEX NAME)

CM 1

CRN 20942-99-8

CMF C12 H24 O11

CDES 5:A-D-GLUCO, D-MANNO

Absolute stereochemistry.

CM 2

CRN 534-73-6 CMF C12 H24 O11 CDES *

Absolute stereochemistry.

L96 ANSWER 19 OF 26 USPATFULL on STN

ACCESSION NUMBER: 2002:279698 USPATFULL

TITLE: Composition and method for controlled release

injections

INVENTOR(S): Roser, Bruce Joseph, Cambridge, UNITED KINGDOM

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2002155129	A1	20021024	
	US 6623762	B2	20030923	
APPLICATION INFO.:	US 2001-784153	A1	20010216	(9)
DOCUMENT TYPE:	Utility			
FILE SEGMENT:	APPLICATION			

LEGAL REPRESENTATIVE: JACOBSON HOLMAN PLLC, 400 SEVENTH STREET N.W., SUITE

600, WASHINGTON, DC, 20004

NUMBER OF CLAIMS: 20 EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 2 Drawing Page(s)

LINE COUNT: 456

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention is a pharmaceutical composition and method For AB controlling the release of a drug or vaccine to a patient where a slow, controlled release of drug or antigen occurs over a considerable period of time after injection. The drug or vaccine is contained in sugar glass microspheres and then placed in an anhydrous liquid, preferably perfluorocarbon, so that the vaccine is protected against dissolution while remaining surrounded by anhydrous liquid. This simple non-toxic system, deliverable by current syringe or present or future needle-free systems, is inexpensive and reliable and aids in parenteral drug delivery or mass immunization campaigns by reducing the need for repeated injections.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

585-86-4, Lactitol 585-88-6, Maltitol

(controlled release injections contg. perfluorocarbons)

RN 585-86-4 USPATFULL

CN D-Glucitol, 4-O-.beta.-D-galactopyranosyl- (9CI) (CA INDEX NAME)

RN 585-88-6 USPATFULL

CN D-Glucitol, 4-O-.alpha.-D-glucopyranosyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L96 ANSWER 20 OF 26 USPATFULL on STN

ACCESSION NUMBER: 2002:16588 USPATFULL

TITLE: Modified glycosides, compositions comprised thereof and

methods of use thereof

INVENTOR(S): Colaco, Camilo, Cambridgeshire, UNITED KINGDOM

RELATED APPLN. INFO.: Continuation of Ser. No. US 1998-111925, filed on 8 Jul

1998, PENDING A 371 of International Ser. No. WO

1998-GB1962, filed on 3 Jul 1998, UNKNOWN

NUMBER DATE

PRIORITY INFORMATION: US 1997-51727P 19970703 (60)

DOCUMENT TYPE: Utility FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: SALIWANCHIK LLOYD & SALIWANCHIK, A PROFESSIONAL

ASSOCIATION, 2421 N.W. 41ST STREET, SUITE A-1,

GAINESVILLE, FL, 326066669

NUMBER OF CLAIMS: 29 EXEMPLARY CLAIM: 1 LINE COUNT: 1080

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Modified glycosides are provided which can be used to form a variety of

materials including solid delivery systems, and optically clear colored devices or coatings. The solid delivery systems can be used for delivery and release of a variety of substances can be in the form of tablets for oral administration, or in the form of powders, microspheres or implants for intravenous, intradermal, transdermal, pulmonary or other route of administration. The modified glycosides may be processed to form a vitreous glass matrix having a substance, such as a therapeutic agent, or an optically active dye incorporated therein. In one embodiment, the vitreous glass matrix is provided in a solid dose form which is capable of releasing a therapeutic substance in situ at various controlled rates.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

(modified glycosides and compns. comprised thereof for medical and other uses)

RN 37091-07-9 USPATFULL

CN D-Glucitol, 4-0-(2,3,4,6-tetra-O-acetyl-.beta.-D-galactopyranosyl)-, pentaacetate (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 41897-24-9 USPATFULL

CN D-Glucitol, 4-O-(2,3,4,6-tetra-O-acetyl-.alpha.-D-glucopyranosyl)-, pentaacetate (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 41897-25-0 USPATFULL

CN D-Glucitol, 6-0-(2,3,4,6-tetra-O-acetyl-.alpha.-D-glucopyranosyl)-, pentaacetate (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 219827-68-6 USPATFULL

CN D-Mannitol, 1-0-(2,3,4,6-tetra-O-acetyl-.alpha.-D-glucopyranosyl)-, pentaacetate (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 219827-69-7 USPATFULL

D-Glucitol, 6-O-(2,3,4,6-tetra-O-acetyl-.alpha.-D-glucopyranosyl)-, pentaacetate, mixt. with 1-O-(2,3,4,6-tetra-O-acetyl-.alpha.-D-glucopyranosyl)[D-mannitol] pentaacetate (9CI) (CA INDEX NAME)

CM 1

CN

CRN 219827-68-6

CMF C30 H42 O20

CM 2

CRN 41897-25-0 CMF C30 H42 O20

Absolute stereochemistry.

L96 ANSWER 21 OF 26 USPATFULL on STN

ACCESSION NUMBER: 2002:261057 USPATFULL TITLE: Storage of materials

INVENTOR(S): Franks, Felix, Cambridge, UNITED KINGDOM

Hatley, Ross H. M., Hardwick, UNITED KINGDOM

PATENT ASSIGNEE(S): Inhale Therapeutics Systems, Inc., San Carlos, CA,

United States (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION: APPLICATION INFO.:	US 37872 US 5098893 US 1999-270791 US 1990-479939	E1	20021008 19920324 19990317 19900212	(Original) (9) (Original)

PRIORITY INFORMATION: GB 1989-3593 DOCUMENT TYPE: Reissue FILE SEGMENT: GRANTED

PRIMARY EXAMINER: Russel, Jeffrey E.

LEGAL REPRESENTATIVE: Cagen, Felissa H., Neifeld, Richard A., Evans, Susan T.

NUMBER OF CLAIMS: 94 EXEMPLARY CLAIM: 18

NUMBER OF DRAWINGS: 0 Drawing Figure(s); 0 Drawing Page(s)

LINE COUNT: 2518

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A material or mixture of materials which is not itself storage stable is rendered storage stable by incorporation into a water-soluble or swellable glassy or rubbery composition which can then be stored at ambient temperature. Recovery is by adding aqueous solution to the composition.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 534-73-6 64519-82-0, Palatinit

(as carrier substance for stable storage of lactate dehydrogenase)

RN 534-73-6 USPATFULL

CN D-Glucitol, 6-O-.alpha.-D-glucopyranosyl- (9CI) (CA INDEX NAME)

RN 64519-82-0 USPATFULL

CN D-Glucitol, 6-O-.alpha.-D-glucopyranosyl-, mixt. with 1-O-.alpha.-D-glucopyranosyl-D-mannitol (9CI) (CA INDEX NAME)

CM 1

CRN 20942-99-8 CMF C12 H24 O11 CDES 5:A-D-GLUCO, D-MANNO

Absolute stereochemistry.

CM 2

CRN 534-73-6 CMF C12 H24 O11 CDES *

L96 ANSWER 22 OF 26 USPATFULL on STN

2001:199779 USPATFULL ACCESSION NUMBER:

Solid delivery systems for aroma ingredients TITLE: INVENTOR(S): Mutka, Jerry Richard, Corona, CA, United States McIver, Robert Clark, Tabernacle, NJ, United States Palmer, Christine Ann, Whittier, CA, United States

Benczedi, Daniel, Carouge, Switzerland

Bouquerand, Pierre-Etienne, Pers-Jussy, France

Firmenich, Antoine, Geneva, Switzerland

NUMBER KIND DATE ________ PATENT INFORMATION: US 2001038879 A1 20011108 US 6607778 B2 20030819 APPLICATION INFO.: US 2001-847906 20010503 (9) A1 RELATED APPLN. INFO.:

Continuation of Ser. No. WO 1999-IB1777, filed on 3 Nov

1999, UNKNOWN Continuation-in-part of Ser. No. US

1998-185536, filed on 4 Nov 1998, ABANDONED

NUMBER DATE ------

PRIORITY INFORMATION: IN 1998-330998 19981109

DOCUMENT TYPE: Utility FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: ALIREZA KARIMI ZIARANI, 36 RODDA BOULEVARD,

SCARBOROUGH, ON, M1E 2Z6

NUMBER OF CLAIMS: EXEMPLARY CLAIM: 1 LINE COUNT: 1061

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to novel solid systems for the delivery of aroma chemicals and flavoring ingredients, including an extrusion formed matrix containing an effective amount of certain specific hydrophilic aroma materials. These systems are useful for flavoring consumer products. An extrusion of solid Furaneol.RTM. compound and derivatives that have a content of up to 40% by weight of Furaneol.RTM. compound are disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 585-86-4, Lactitol 585-88-6, Maltitol

64519-82-0, Isomalt

(solid delivery systems for aroma ingredients)

585-86-4 USPATFULL RN

CN D-Glucitol, 4-0-.beta.-D-galactopyranosyl- (9CI) (CA INDEX NAME)

RN 585-88-6 USPATFULL CN D-Glucitol, 4-O-.alpha.-D-glucopyranosyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 64519-82-0 USPATFULL

CN D-Glucitol, 6-O-.alpha.-D-glucopyranosyl-, mixt. with 1-O-.alpha.-D-glucopyranosyl-D-mannitol (9CI) (CA INDEX NAME)

CM 1

CRN 20942-99-8 CMF C12 H24 O11 CDES 5:A-D-GLUCO, D-MANNO

Absolute stereochemistry.

CM 2

CRN 534-73-6 CMF C12 H24 O11 CDES *

L96 ANSWER 23 OF 26 USPATFULL on STN

ACCESSION NUMBER: 2001:78717 USPATFULL

TITLE: Food products containing seamless capsules and methods

of making the same

INVENTOR(S): Kiefer, Jesse John, Belvidere, NJ, United States
Glenn, Blake Henderson, Madison, NJ, United States

PATENT ASSIGNEE(S): Warner-Lambert Company, Morris Plains, NJ, United

States (U.S. corporation)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1996-686649, filed

on 24 Jul 1996 Division of Ser. No. US 1995-412672, filed on 29 Mar 1995, now patented, Pat. No. US

5595757, issued on 21 Jan 1997

DOCUMENT TYPE: Utility FILE SEGMENT: Granted

PRIMARY EXAMINER: Page, Thurman K.
ASSISTANT EXAMINER: Bennett, Rachel M.
LEGAL REPRESENTATIVE: Vag, Linda A.

NUMBER OF CLAIMS: 23 EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 2 Drawing Figure(s); 2 Drawing Page(s)

LINE COUNT: 695

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Consumable products including seamless capsules having an outer shell made of a carbohydrate material in a glassy state and an inner core.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 585-86-4, Lactitol 585-88-6, Maltitol

64519-82-0, Isomalt

(methods of making food products contg. seamless capsules)

RN 585-86-4 USPATFULL

CN D-Glucitol, 4-O-.beta.-D-galactopyranosyl- (9CI) (CA INDEX NAME)

RN 585-88-6 USPATFULL

CN D-Glucitol, 4-O-.alpha.-D-glucopyranosyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 64519-82-0 USPATFULL

CN D-Glucitol, 6-O-.alpha.-D-glucopyranosyl-, mixt. with 1-O-.alpha.-D-glucopyranosyl-D-mannitol (9CI) (CA INDEX NAME)

CM 1

CRN 20942-99-8

CMF C12 H24 O11

CDES 5:A-D-GLUCO, D-MANNO

Absolute stereochemistry.

CM 2

CRN 534-73-6 CMF C12 H24 O11 CDES *

Absolute stereochemistry.

L96 ANSWER 24 OF 26 USPATFULL on STN

ACCESSION NUMBER: 1998:9031 USPATFULL

TITLE:

Printing inks

INVENTOR(S):

Croker, John, Broxbourne, England Kelly, Paula Michelle, London, England Burr, Raymond David, Surrey, England

PATENT ASSIGNEE(S):

Domino Printing Sciences Plc, England (non-U.S.

corporation)

NUMBER KIND DATE PATENT INFORMATION: US 5711791 19980127 APPLICATION INFO.: US 1996-628124 19960404

NUMBER DATE PRIORITY INFORMATION: GB 1995-7881 19950418

DOCUMENT TYPE: FILE SEGMENT:

Utility Granted

PRIMARY EXAMINER:

Klemanski, Helene

LEGAL REPRESENTATIVE:

Laff, Whitesel, Conte & Saret, Ltd.

NUMBER OF CLAIMS: EXEMPLARY CLAIM:

LINE COUNT:

831

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

Ink jet inks are disclosed comprising a liquid vehicle which is preferably a blend of ethanol and water in a weight ratio of 23/70 (equivalent to 30/70 by volume) to 71/10 (equivalent to 90/10 by volume), a binder, which comprises a sugar or a sugar alcohol or a mixture thereof, preferably a mixture of sorbitol and maltitol, which is soluble in the liquid vehicle, a colorant which is soluble in the liquid vehicle and a surfactant comprising 90% or more of phosphatidylcholine or lysophosphatidylcholine, which is soluble in the liquid vehicle.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

585-88-6, Maltitol

(binder; aq. inks contg. sugar (alc.) binders and

(lyso)phosphatidylcholine surfactants for food and other substrates)

585-88-6 USPATFULL RN

CN D-Glucitol, 4-O-.alpha.-D-glucopyranosyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L96 ANSWER 25 OF 26 USPATFULL on STN

ACCESSION NUMBER: 95:27215 USPATFULL

TITLE: Method of preparing Limulus amoebocyte lysate

INVENTOR(S): Method of preparing Limitus amoebocyte Tysate

Tanaka, Shigenori, Tokyo, Japan

Aketagawa, Jun, Tokyo, Japan Shibata, Yuko, Tokyo, Japan

PATENT ASSIGNEE(S): Seikagaku Kogyo Kabushiki Kaisha (Seikagaku

Corporation), Tokyo, Japan (non-U.S. corporation)

	NUMBER	KIND DATE	
PATENT INFORMATION:	US 5401647	19950328	
	WO 9206381	19920416	
APPLICATION INFO.:	US 1992-859411	19920527	(7)
	WO 1991-JP1308	19910927	
		19920527	PCT 371 date
		19920527	PCT 102(e) date

NUMBER DATE

PRIORITY INFORMATION: JP 1990-255201 19900927

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted

PRIMARY EXAMINER: Warden, Robert J. ASSISTANT EXAMINER: Crawford, L. M.

LEGAL REPRESENTATIVE: Sughrue, Mion, Zinn, Macpeak & Seas

NUMBER OF CLAIMS: 5 EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 5 Drawing Figure(s); 3 Drawing Page(s)

LINE COUNT: 1144

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

Disclosed is a method of preparing limulus amoebocyte lysate substantially free from factor G which comprises bringing limulus amoebocyte lysate into contact with an insoluble carrier on which a (1.fwdarw.3)-.beta.-D-glucoside structural portion represented by the following formula [I] produced by depolymerizing and/or fractionating a carbohydrate chain is immobilized: ##STR1## wherein n represents an integer of 2 to 370.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 34980-39-7D, Laminaribiose, conjugates with Toyopearl

(as stationary phase, for G factor removal from Limulus amebocyte lysate for endotoxin-specific assay)

RN 34980-39-7 USPATFULL

CN D-Glucose, 3-O-.beta.-D-glucopyranosyl- (6CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry.

L96 ANSWER 26 OF 26 USPATFULL on STN

ACCESSION NUMBER: 92:23177 USPATFULL TITLE: Storage of materials

INVENTOR(S): Franks, Felix, Cambridge, England

Hatley, Ross H. M., Hardwick, England

PATENT ASSIGNEE(S): Pafra Limited, Basildon, England (non-U.S. corporation)

DOCUMENT TYPE: Utility

FILE SEGMENT: Granted PRIMARY EXAMINER: Griffin

PRIMARY EXAMINER: Griffin, Ronald W.

LEGAL REPRESENTATIVE: Abelman, Frayne & Schwab

NUMBER OF CLAIMS: 16
EXEMPLARY CLAIM: 1
LINE COUNT: 747

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A material or mixture of materials which is not itself storage stable is rendered storage stable by incorporation into a water-soluble or swellable glassy or rubbery composition which can then be stored at ambient temperature. Recovery is by adding aqueous solution to the composition.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 534-73-6 64519-82-0, Palatinit

(as carrier substance for stable storage of lactate dehydrogenase)

RN 534-73-6 USPATFULL

CN D-Glucitol, 6-O-.alpha.-D-glucopyranosyl- (9CI) (CA INDEX NAME)

RN 64519-82-0 USPATFULL

CN D-Glucitol, 6-O-.alpha.-D-glucopyranosyl-, mixt. with 1-O-.alpha.-D-glucopyranosyl-D-mannitol (9CI) (CA INDEX NAME)

CM I

CRN 20942-99-8

CMF C12 H24 O11

CDES 5:A-D-GLUCO, D-MANNO

Absolute stereochemistry.

CM . 2

CRN 534-73-6 CMF C12 H24 O11 CDES *

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